THE

PALESTINE EXPLORATION FUND.

PREFACE.

It is with the deepest sorrow that we record the death of Mr. C. F. Tyrwhitt Drake, which took place at Jerusalem, on Tuesday the 23rd ult. An attack of fever was followed by complications of a kind which, although the patient rallied at one time so as to give hopes of recovery, proved fatal after three weeks of suffering. Mr. Drake was only twenty-eight years of age. His loss is a grievous one to the work of exploration, and our readers will greatly miss the intelligent and pleasant letters which have for two years and a half helped to keep them informed of the progress of the Survey. In our pages farther on will be found a short memorial paper by Lieutenant Conder.

Lieutenant Conder contributes to the present number a paper on the identification of Ænon, the "place near Salim, where there was much water" (St. John iii. 23). Three sites have been proposed; Lieutenant Conder advocates that first proposed by Dr. Robinson. He offers an answer to the problem of the tells of Palestine; they are, he thinks, brickmaking accumulations. He traces the victory and pursuit of Gideon (Judges vii.), identifying, as he goes, the places whither the host fled, "Beth-shittah in Zererath, and to the border of Abel-meholah" (Judges vii. 22). If the chapter be read side by side with Lieutenant Conder's comments, it will be found to have received much additional light. If his proposed identification of Zererath with Ain Zahrah be accepted, it is an entirely new discovery. Lieutenant Conder's argument in favour of Ras el Ain as the site of Herod's Antipatris may be read with the paper by Major Wilson on the same subject.

Mr. Drake, in the last report we have from him, speaks of the continued subsidence of the bottom of the Dead Sea. He also speaks of the curious Kurn Sartabeh, of Akrabeh, and the ruins of Herod's town of Phasaelas.

The voluminous reports of M. Ganneau continue to be of the greatest importance and interest. They are full of inscriptions, legends, traditions, and suggestions. To architects and those

interested in the controversies which have grown up round the Kubbet es Sakhra, the most valuable portions of the reports will be the account of the columns and balustrade of the building.

The excavations in Jerusalem are, for want of funds, very limited, consisting principally of those in and about the rock-cut chambers north of the Via Dolorosa.

The identifications proposed by M. Ganneau in this number, are, that of Malha with Manocho (see the Septuagint version, Joshua xix. 9), the Forest of Hareth (1 Sam. xxii. 5) with Herché, and Kurn Sartabeh with the place in which Joshua saw the captain of the Host of the Lord (Joshua v. 13—15).

An account of the Second Statement of the American Exploration Society will be found in the present number. It is necessarily brief.

The most recent information on the Shapira Collection is also published. We do not, however, undertake to give in future further arguments on the basis of facts already known.

FINANCIAL POSITION OF THE FUND.

Received from March 26th, to June 26th, 1874 ...	£788	11	5
Including proceeds of Lectures	31	19	4
Sale of Publications at Lectures ...	19	14	2
Sale of Photographs and elsewhere ...	9	16	0
Balance in banks (June 26th)	306	14	0

PROPOSED ARRANGEMENTS OF THE FUND.

Lieutenant Conder will return to Palestine in the autumn, and resume the work of the Survey. The non-commissioned officers are in Jerusalem, under the charge of Dr. Chaplain.

Lieutenant Conder will read a paper on the Survey at the meeting of the British Association in August, at Belfast.

M. Ganneau will continue his work at Jerusalem and elsewhere during the summer.

TRANSLITERATION AND NOMENCLATURE.

It has been decided by the Publication Committee to adopt for the future Robinson's system of transliteration in all their reports and papers.

THE PUBLICATION OF THE MAP.

It has been resolved that until the new map is completely finished no steps shall be taken towards publishing any portion of it.

THE ANNUAL MEETING.

This was held on Tuesday, June 23rd, at the Royal Institution. In the unavoidable absence of the Archbishop of York, the chair was taken by the Dean of Westminster. Lieutenant Conder read a paper on the Survey, and resolutions were proposed by Sir Bartle Frere, Gen. Sir Frederick Goldsmid, Rev. George Williams, Rev. Dr. Manning, Rev. Dr. Porter, and Mr. George Grove. A full report will be published in the next *Quarterly Statement*.

PRICE OF THE *QUARTERLY STATEMENT*.

In future this will be half-a-crown to non-subscribers.

THE AMERICAN SOCIETY.

Intelligence has been received from the Secretary of New York that the sum of 60,000 dols. has been collected, and that the money is still flowing in. A second expedition to carry on the work of the first will be dispatched immediately.

In Memoriam.

CHARLES F. TYRWHITT DRAKE.

LONDON, 26*th June*, 1874.

THE sad news which has just reached us from Palestine entails on me the painful duty of writing a few last words on one who for two years has been my constant and almost only companion. The death of Charles F. Tyrwhitt Drake adds one more name to the list of those who have fallen in harness in the exploration of Palestine. The fatal Jordan valley climate, to the effects of which I think our heavy loss is mainly attributable, took one member from Lynch's party. Dr. Tristram's expedition did not escape a similar calamity. The exploration of Jerusalem cost the life of one of Capt. Warren's men, and the health of another. In all of these expeditions, however (as in the parallel case of African travel), the actual head of the party invariably escaped. We had trusted that, in the serious illness which obliged Capt. Stewart to resign the command of the survey of Palestine, our debt to the country was paid, and we invariably looked forward with hope and in confidence that all other members of the original party would be able to see the satisfactory termination of their work.

It has pleased God that this should be otherwise, and the only consolation which can be found for the survivors is, that all that could be done was done to preserve the valuable life; that Mr. Drake was in the hands of kind friends and trustworthy followers; that the medical advice of Dr. Chaplin was, both from his peculiar experience and his unusual ability, all that could be desired, and that his treatment of the case was entirely confirmed by the opinion of his brother practitioners.

I believe that from his childhood Mr. Drake suffered from an asthma, which rendered life in his native country almost an impossibility. He often told me that he felt it beyond hope that he should live to see his prime, and it was to the enthusiastic desire to do something worth remembering in a short life that we must attribute that disregard of fatigue and imprudent expenditure of strength which hastened on the end.

It is but a poor comfort for those he has left behind to remember that his ambition was to a great extent realised, and that, though he was just on the point of undertaking new and important explorations, still he felt that already his name was

made, and that as long as any interest is felt in the question of Biblical investigation, it will be remembered with honour and esteem.

His acquaintance with Bible lands dates from the commencement of the Sinai Ordnance Survey. Of that expedition he was to have been a voluntary member, but circumstances detained him, and prevented his joining till the work was almost completed, and a severe attack of dysentery very nearly proved fatal at the outset of his career. His subsequent work in the Desert of the Wanderings in company with Professor Palmer, leading to important and interesting discoveries, is well known; as also his explorations in the Antilibanus, and the eastern deserts and Hauran, described in "Unexplored Syria." The value of these labours were fully appreciated by the Royal Geographical Society (of which he was a Fellow), and all other authorities capable of forming an opinion. Had he been able to complete these latter explorations, he would probably have known more of trans-Jordanic Palestine than any one now living.

On joining as a volunteer the Survey Expedition, he found himself suddenly called upon (in consequence of Captain Stewart's illness) to assume all the responsibilities and duties of a commander. Had he shrunk from the delicate and difficult position which a civilian has to occupy when in charge of trained soldiers, the Great Survey would have been a failure, and the success of this important work must always be attributable in great measure to his courage and tact. For six months, and those passed in the worst hill country in Palestine, at the very commencement of the work, when Europeans and natives were alike unused to the practical details, and unable to communicate together, Mr. Drake had to act as commander, guide, interpreter, and archæologist. The progress was extraordinary, and his firm and just management, tact, and acquaintance with the habits, prejudices, and character of the Syrians were advantages of which I have felt the benefit ever since the command devolved upon me.

Throughout the expedition he suffered much in health. A man less enthusiastic would have quitted Palestine, and perhaps escaped the sad fate which I cannot but attribute to want of due care for health and over-work and exposure at a time when rest and a good climate were indispensable. Bent as he was, however, on continuing the work he had begun, it was worse than useless to endeavour to persuade him to give it up. Soon after my arrival his liver was seriously affected by the trying work entailed

on us all in measuring the check base line. He was obliged to leave on a visit to Egypt, but it was not until he returned to England last spring that any marked improvement in his health took place. On his return in October, we all thought him looking stronger and better. Then came the most serious check our work ever sustained, of which little is known to others than members of the party. In November the terrible Jericho fever broke out in our camp at 'Ain el Sultán. In a few days no fewer than ten members of the party, including Mr. Drake, were struck down, and the anxiety of those who escaped was, as may be imagined, very great. A full day's journey (and it was by special Providence that we were not more) from a doctor, or from any source of supply, in a malarious climate, a desert, and surrounded by wild and hostile tribes, with most of the servants incapable, and the rest only kept from deserting us by the certainty of being shot down, the anxiety of the position was as trying as can well be imagined. The unexampled kindness of Dr. Chaplin and Mr. Neil, under the circumstances, is an honour to England. Though suffering himself, and quite unfit to be out of bed, the doctor mounted his horse, and accompanied by Mr. Neil, set out to come down to us at Jericho, and met us bringing up Mr. Drake in the litter. The hotel-keeper, Mr. Hornstein, at the risk of losing every one of his guests, took him in, and spared no pains to make him comfortable.

The English hospital was a refuge for our poor servants. The care and skill of Dr. Chaplin saved Mr. Drake's life, and probably that of others. His recovery was rapid, and his state of health seemed more satisfactory than it had been for a long time, but he was, I think, quite unaware of the extreme danger he had gone through. I found six months later that he had never known how Dr. Chaplin, suffering himself most cruelly, had watched with me a whole night of delirium, hardly expecting that he would live till morning. We both felt at the time that he ought on his recovery to leave the country, and I shall always regret that I did not represent this more strongly to the Committee, but that recovery was so rapid, and apparently so satisfactory, that it justified us in hoping he might be able to continue the work.

I have enlarged on these circumstances, thinking it might be some consolation to his friends to know that all care was taken of him in his first illness, whence they may judge that he was equally well cared for and attended during his last.

The survey of the Jordan valley was resumed. The exposure

and hardship were greater than anything we had before endured. For ten days we drank brackish water, and for nearly all the time we were subject to alternations of extreme heat and cold, snow, rain, and unusual atmospheric pressure. The whole party was much exhausted, although consisting of men beyond the average in strength and power of endurance. It was true that Mr. Drake was far more cautious and saving of his strength than formerly, but he was unable to escape the effects of rain and malaria.

On leaving the country I had felt some apprehensions of the return of the fever in summer, and written to his friends at Damascus, where I expected him to be, warning them not to allow him to journey alone in June—a time when he usually suffered from low fever. When the news arrived that he had been seized, I could not but feel thankful that he was still in Jerusalem, knowing that the medical care he would get there was far superior to any in other parts of Palestine. In the face of such complications, however, as followed rapidly, no medical skill could, however, be of use.

Of Mr. Drake's personal character, it will not become a younger man to speak. I always felt the comfort of his experience and his just and honourable dealing. His fitness for the work was in some respects peculiar, and he may be best judged by the fact, that whilst travelling in company with men of very various disposition and ability, he never complicated the difficulties of work by personal quarrels, and was well spoken of by all. His excellent colloquial knowledge of Arabic, no less than his fine figure and skill in all exercises, made him unusually respected by the Arabs and native authorities. His justice, integrity, and firmness were qualities invaluable in the East, and his good-nature and gentlemanly feeling enabled us for two long years of trying work, in a delicate relative position, to live together, almost unseparated, without so much as a single unkind word passing between us.

CLAUDE R. CONDER, Lieut. R.E.

THE JERUSALEM RESEARCHES.

LETTERS FROM M. CLERMONT-GANNEAU.

VII.

JERUSALEM, *March* 5, 1874.

Excavation within the Sakhra.

IN one of my recent visits to the Haram, I remarked that in one or two places they had taken away some of the slabs covering the ground within the Sakhra: (1) before the gate of the cave; (2) before the Eastern gate called *Bab en neby Daoud*. Ascertaining that on Saturday last they were going to dig at the second point, I went on that day to the Mosque, but unfortunately too late; the excavation, insignificant (0·30 metre) in dimensions, was already finished and the hole filled up. Vexed at losing an opportunity which might never occur again, I succeeded in my entreaties that the excavation should be begun over again before my eyes. I chose a point different from the first, trying to get as near as possible to the rock. We attacked the soil again, 0·50 metre, S.S.E. of the angle of the south pillar placed between the eastern gate and the first circle of columns and pillars which surrounds the Sakhra properly so called.

The excavation was pushed to a total depth of 0·90 metre, not counting the thickness of the upper slab. After a layer (0·30 metre) composed of greyish earth, mixed with stones and fragments of marble, a bed of cement was reached extremely compact and about 0·07 metre in thickness; the material was very hard, and the pick struck fire against the fragments of stone which were mixed up with it. I gathered a specimen of this cement, which is grey in colour, and seems, like the Arabic cements, to be mixed with cinders and charcoal.

Immediately beneath this layer appears the red earth, the same as is to be seen in Jerusalem and its environs, in those places where there have been few inhabitants. We excavated in this earth for 0·33 metre more, till it was impossible to go any lower without making a regular excavation and exciting susceptibilities. The conclusions to be drawn from this little sounding are these: (1) There is no rock 0·90 metre below the surface at the point of examination, which might have been guessed beforehand, as, judging from the Sakhra itself, the rock must have about here a general inclination of west to east. (2) The existence of a layer of earth almost untouched. (3) Immediately above this earth a bed of cement, forming the general substratum of the edifice, and apparently of Arabic origin. (4.) A layer of earth between this and the surface slabs.

Fragments of inscriptions.

A number of Arabic texts, *neskhi*, flourishes, are daily being discovered in the interior of the Sakhra during the course of the works; many of these inscriptions are on plaques of marble which have been used in covering up the interior walls of the edifice, the bases of columns, sides of pillars, &c. Many of these texts are interesting from an epigraphic point of view, or for the history of the Haram. They prove in any case how many successive alterations the Mosque has undergone. Not only are these ancient materials which have been used in the first construction, there are also anterior Arabic materials used for subsequent modifications and alterations. Among these texts I remarked very fair specimens of Kurmatic writing: one in *neskhi* contains a part of the Sourati of the Coran called El Koursi; and the mention of a work executed by the orders of an Emir Zeyned-dín, son of Aly, son of Abd-allah, about the year 500 of the Hejira.

Bases of columns, &c.

We have been several times to the Mosque to study the bases of its pillars and columns uncovered, and the famous semicircular arcading of the external wall. M. Lecomte has made detailed drawings of our observations, which will reach you with this report. An important fact has been revealed by the fall of certain mosaics. It is the existence of a string course in stone in the interior, and nearly in the middle of the drum which supports the cupola. The profile of this string course appeared to M. Lecomte to resemble a mediæval profile of the 12th century. Here is a new element which appears now only to complicate still more the already obscure problem of the origin of the actual monument.

As for the semicircular arcade of the external wall, it is still very difficult to pronounce upon it. Up to the present, however, two things are quite certain: (1) The absence of the mediæval dressing on the blocks entering into the construction of the wall and the arches; (2) the existence on one of the blocks of a mason's mark of undetermined period, having this form It is on the second pier left of the west door, and the third course above the leaden roofing.

Projected excavation within the Haram.

A work is about to be undertaken in the Haram, which I shall follow with the greatest attention. There has been found, it is said, in the wall of the Haram, an Arabic inscription, which states that by digging at the place where it was written a great quantity of stones will be found which will serve for repairs or reconstructions. Three years ago, following this indication, they sunk a shaft of some depth, since covered up, but which I have seen open. This excavation led to no result. The new director (*mémoūr*) sent from Constantinople to superintend all the Haram works is about to reopen this shaft. The work, in the Haram itself, may be of the greatest importance, and I shall follow it with the greatest care possible. The point chosen is a little south of bench mark 2387·7 of the Ordnance Survey map.

The Inscription on the Inner Stones.

The inscription spoken of above is on the exterior of the eastern wall at the height of the loopholes (second course, counting the battlements), about 133 metres north of the south-east angle. Observe that

at this place is a very sensible break in the continuity of the Arab wall, seeming to indicate a later repair; the line of junction is oblique, descending from south to north at an angle of about 45°. The inscription is as follows: "In this place are stones buried for the use of the Haram esh Sherîf."

The writing is of the kind called *sulus*. The text presents in construction and orthography certain faults which seem to indicate a Turkish hand. It may be that this text was contemporary with the works executed in the reign of the Sultan Selim, who repaired the ramparts of the city. The first excavation undertaken under Kondret Bey on these indications had been placed immediately behind the inscription. The *mémoûr* proposes to open it a little farther to the north, and, if necessary, to push a trench parallel to the wall. According to Captain Warren's map, we ought to light on the rock at a depth of about ten mètres. It remains to be seen whether the inscription is in its original place.

Inscription on the building of the south-west wall.

On going back to the Haram we examined a very fine base placed near the entrance of the magazine close to El Aksa, at the east. The lower face is entirely covered by a beautiful Arabic inscription in relief, the meaning of which I made out at once, to the great astonishment of my Mussulman companions. It relates the restoration or construction of a surrounding wall (*soûr*) of the city, or Haram, under the reign of the Sultan *El Melik el Mansour seif ed dên Gilaoun es sâlêhy*. This sultan, seventh king of the Mameluke dynasty of the Baharites, reigned from 678 to 698 of the Hejira (1279—1290 A.D.)

Rectification of a passage in Mejir ed Dîn.

The Arabic historian of Jerusalem, Mejir ed Dîn, mentions among the works executed by order of this sultan, A.H. 678, the reconstruction of the "roof" of the Mesjid el Aksa, on the south-west side, near the Mosque of the Prophets. Such, in fact, states the Arabic text published at Cairo. It is evident that the editors have made the mistake of writing *sagaf* for *sour*, *roof* for *wall*. This is clear (1) from the possible confusion of these two words in Arabic writing; (2) from the impossibility of speaking of the *roof* of the Mesjid el Aksa, the phrase meaning the whole Haram; (3) from the inscription which I have just quoted.

Mediæval mouldings.

Between the El Aksa and the Sakhra I observed, at the foot of the south staircase which leads to the platform, on the left, a fragment of a moulding with the mediæval dressing strongly marked. This *morceau*, which M. Lecomte will sketch on the first opportunity, is extremely interesting, because it furnishes us with a moulding belonging without possible doubt to the period of the Crusades, further specimens of which we shall doubtless find in edifices of date hitherto undetermined. In the Barrack wall I have found another, of which also we shall take a drawing.

The blocks surmounting the columns of the Kubbet es Sakhra.

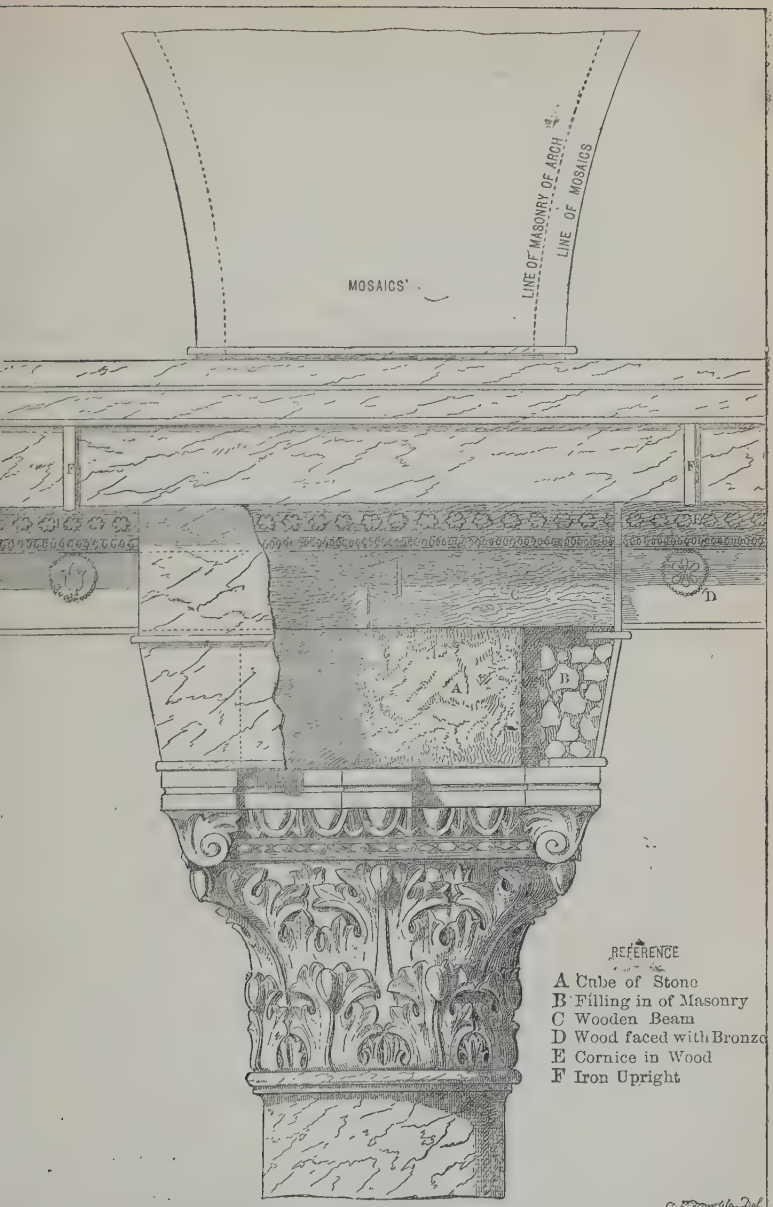
We have at length been enabled to examine closely the base of the arches hitherto hidden by a casing of marble, over the columns of the intermediary peristyle of the Kubbet es Sakhra. One of the external faces was stripped, and we obtained leave to mount a ladder and examine

the capital closely. You will have a drawing of it; meantime here are a few words of description which will give an idea of the arrangement, to the knowledge of which archæologists attach great importance.

The capital of the column is surmounted by a cubical abacus, over which passes the beam which runs all round the edifice. This beam consisted of two pieces of wood, clamped by a dovetailed coupling. The point of junction is in the middle of the abacus. Upon the beam rest the abutments of the arches. It is evident that this part of the beam, now masked by the marble casing, was originally intended to be seen, because we found the ornamentation of the beam continuing under the marble. As for the abacus, it seems clear that it was always intended to be covered with some kind of ornamentation, for its bare surface and its rudeness would have made a disagreeable contrast with the richness of the general decoration.

As for the presence of the beam passing over the capitals, one can only remember the classical fact not long since mentioned by M. de Vogüé, in these terms:—"The presence of the wooden tiebeam is characteristic . . . it appears to be of Arab invention, for it is found in the greater number of early mosques, such as the Mosque of Amrou at Cairo, and the Mosque el Aksa, and has never been found, so far as I know, in any church of the fifth or sixth century." We have now to see what is hidden by the marble casing which surmounts the column of the interior perimeter. I hope to obtain equal facilities in this investigation.

Mosaics, &c. It may be interesting to note here an observation that I have recently made, and which I have never seen anywhere else. The scaffolding now erected within the Kubbet es Sakhra has enabled me to examine closely the mosaics ornamenting the walls. I have ascertained that on many of the vertical walls in the interior of the Kubbet es Sakhra, the coloured and gilded little cubes of glass which produce together so marvellous an effect, are not sunk in the walls so that their faces are vertical, but are placed obliquely, so that the faces make an angle with the walls. This ingenious inclination is evidently intended to present their many-coloured facets at the most effective angle of incidence to the eye below. Such is the simple secret which produces the dazzling and magical effect of this decoration. Curiously, the same method has been followed in the construction of the splendid windows of the edifice. They consist of plaster cut into charming designs; in the holes so formed are fixed small pieces of coloured glass, arranged with exquisite taste. I have been able to examine a fragment of one of the window frames, and I observed that all these bits of glass are inserted obliquely, and not vertically, so as to overhang and meet the eye of the visitor at right angles, whence this charming brightness of colour. Perhaps this arrangement of the mosaics belongs to a certain known epoch, perhaps to the time of the construction of the windows, *i.e.*, the sixteenth century.



CAPITAL IN THE KUBBET ES SAKHRA.

Bas-relief in marble representing the triumphal entry of our Lord.

A bas-relief, very remarkable, comes from an Arab house situated near the Damascus Gate, and was found in the basement. One of the sides shows the mediæval dressing to which I have already called attention. This particularity furnishes us with our limit of date, the time of the Crusades, which is very likely, judging from the appearance of the work, to be its real date. Is it the work of a Byzantine artist, working perhaps for the Latin kings? The fragment belongs to a bas-relief representing the triumphal entry of Christ on the Day of Palms. Christ, clothed in a long tunic, with broad sleeves, in folds of classic form and execution, is sitting astride, not sideways, on the ass, which is walking straight on, and seen in profile. The head, which would seem to have been a three-quarters head, has unfortunately been destroyed, apparently by the Mussulmans; the foot is also broken. In the left hand Jesus holds the reins, and with the right hand, now disappeared, gives the benediction with the ordinary gesture, as is easily to be recognised by the movement of the right arm, half raised. It is a pity that this hand has been destroyed, as it would have been easy to see if the sculptor was under Latin or Greek influence, the position of the fingers in the Latin benediction being totally different to that in the Greek. The ass, which is covered with a cloth ornamented with rich embroidery, has also been decapitated by the same iconoclasts apparently. Nevertheless, it is impossible to hesitate on its identity, although the fine shape of the body might cause it to be taken for that of a horse. All doubt, however, is removed by the presence of the foal, which plays by the side of the mother, the head down in a pretty and truthful attitude, showing that the sculptor made a sincere study of nature.

Behind the group, on the right, are to be seen the remains of figures, mostly destroyed by the hammer: on the left are two other figures, clothed in flowing drapery, which have suffered less. The hinder part of the ass rests upon the framing.

The sculpture is in high relief, with attempts at shade effects, and a general inclination of the figures, showing that it was intended to be seen from below. Probably it was some door lintel, or decorative frieze, such as that which surmounts the entrance to the Church of St. John.

It is interesting to compare this subject with the same scene represented in the mosaics of the church at Bethlehem. Essential difference of style and composition exists between these two works. For example, at Bethlehem Christ is seated on the ass, but the foal is absent. These variations are the more curious, because, as has been remarked already (De Vogüé, "Eglises de la Terre Sainte," p. 96), the composition at Bethlehem is absolutely in conformity with the prescription of an ancient Byzantine "Guide of Painting," which contained detailed rules on the manner of treating different subjects.

The author of the mosaics of Bethlehem appear to have followed the nearly parallel narrations of St. John, St. Mark, and St. Luke, who only speak, the one of a young ass (ὀναριον), the other two of a colt (πῶλον). Our artist, on the other hand, seems inspired by St. Matthew.

The mosaist of Bethlehem, and the Byzantine school to which he belonged, took the words used by the Evangelists literally, representing Jesus *sitting*, and not astride upon the ass. It is hardly necessary to remark that this literal interpretation is hardly reasonable, for the Gospel of St. Mark uses the same term in speaking of an ass "whereon never man sat," the word there being evidently used in the ordinary sense of riding.

Besides, we may show by the Hebrew text of Zachariah ix. 9—"Behold thy King cometh unto thee . . . riding upon an ass, and a colt the foal of an ass," to which the Evangelists all four refer—that the normal method of riding is intended, for the word used is *rokeb*.

The interpretation adopted in our bas-relief, although it departs in appearance from the tradition usually followed, is thus in reality more exact and nearer the truth. The sculptor who thus set aside the Byzantine traditions belonged, perhaps, to another country, perhaps to another epoch.

Arab colony from Dhiban settled at Silwan.

The constant communications which I have with the Silwan people have brought to my knowledge a curious fact. Among the inhabitants of the village there are a hundred or so, domiciled for the most part in the lower quarter, and forming a group apart from the rest, called *Dhiâbiyé*, *i.e.*, men of Dhiban. It appears that at some remote period a colony from the capital of King Mesha crossed the Jordan, and fixed itself at the gates of Jerusalem at Silwan. The memory of this migration is still preserved, and I am assured by the people themselves that many of their number are installed in other villages round Jerusalem.

Greek inscription embedded in the wall of the city.

Passing the other day by the gate of St. Stephen (Bab Sitti Miriam), I remarked outside the city, in the wall, some mètres south of the gate, a fragment of Greek inscription which had escaped my attention up to that moment. No one had ever remarked it, although it is one of the most frequented spots in the place. It is on the sixth row of stones. The letters appear well formed, but it is so badly placed, and in such an unfavourable light, that I have only been able to make an imperfect copy. I will make a squeeze of it. Meantime, this is what I have made out:—

C . . . O
T . . . .
OY . . . .
Π . . OC

The stone is placed on its side, so that the lines descend vertically. There is on the left the trace of a framework, which shows that we have the commencement of the text, which apparently consisted of four lines.

Mediæval Latin inscription.

Another inscription in Mediæval Latin is unfortunately also incomplete, but Latin texts of Frank origin are so very rare at Jerusalem that I have thought it worth while to put it together as well as possible. You shall have a drawing of it made after a squeeze.

The inscription appears to have been cut at its two extremities, in order to obtain a block of size convenient for the use for which it was

adapted. It is, in fact, a step in the staircase of an Arab's house, near the Damascus Gate; the same house as that in which the bas-relief I have described above was found.

It is composed of seven lines, of which only the middle part remains, the beginning and the end having been sacrificed by the mason who utilised it. The letters are 0.19 mètre high; they are of Gothic form, and although roughly executed they appear to be contemporary with those of the sepulchral slab of *Philippus de Aubingni*, placed near the entrance of the Church of the Holy Sepulchre. This view is supported by the identity of the formulæ employed, which enables us to reconstruct a great portion of the mutilated inscription.

ETIO
DELA
FRATER
AROCH
SANIM
SC I

Comparing this with the inscription of Philippus de Aubingni, we find that the *et* of the first line is the end of the formula, "Hic jacet," probably preceded by the cross (+). Then comes the name of the person interred, beginning with I and O, or Q. We have a choice of names, such as Iocelinus, Iordanus, Ioscerandus, Johannes, &c. The second line began with part of the name, followed by *de la*, indicating the origin of the person, probably French, if the characters LA are the article, and not the commencement of the name of the place. We have numerous examples of the use of the proper name in the Latin, and the place in the vulgar tongue, as *Ricardus de Belmont*, *Iocelinus de Calmont*, &c.

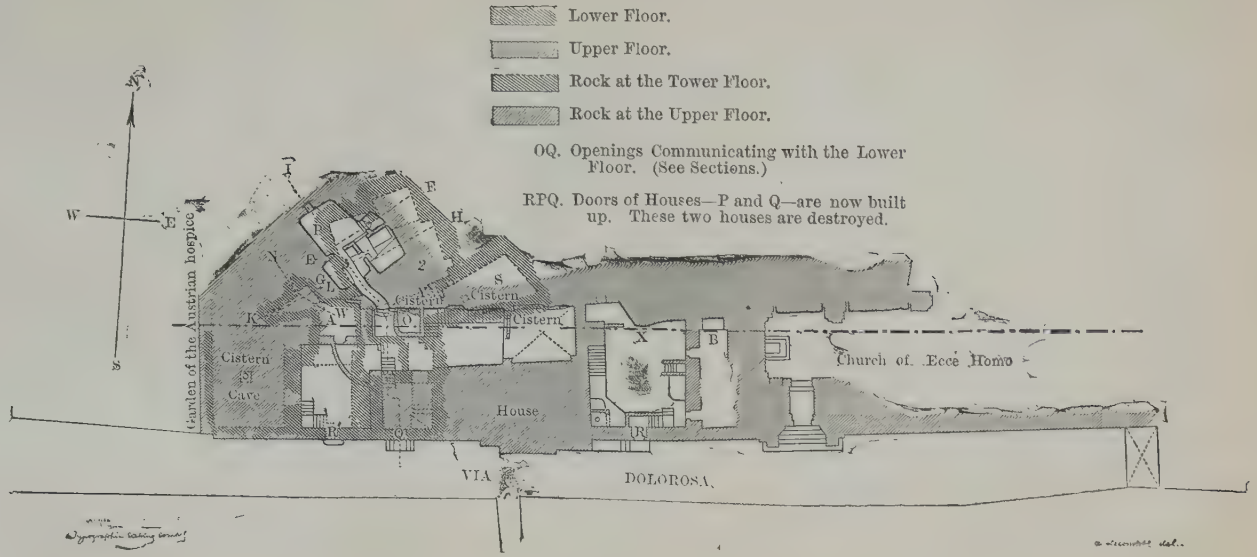
The third line begins with the name of the place, and shows by the word *frater* that the person spoken of belonged to some religious order. The fourth line gives A ROCH . . ., but the R may be a P. Perhaps it is the name of the order. In the fifth we have the word anim(a), certainly preceded by (cuju)s. In the sixth line we have part of (requie)scat i(n). The seventh line ought to have *pace*, followed by *amen*, of which there are traces.

Rock-cut chambers in the Via Dolorosa.

We can now forward you the plans and sections of the rock-cut chambers near the Ecce Homo Arch. The complicated arrangement of the chambers, and the accident which for some time kept us from getting access to them, has retarded the preparation of the plans.

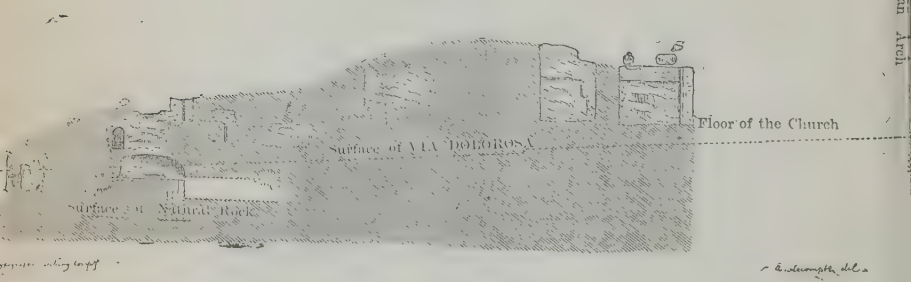
I have already sent you* a detailed description of the place. I have now to add some remarks on certain new facts with relation to a point almost ignored. I have considered, in connection with this subject, the rock which is visible at the Church of the Ecce Homo, already known, because it has an intimate relation to the position of the well observed by us. We have thus a full development of the rocks in a line nearly 42 mètres in

* *Quarterly Statement*, April 1874, p. 105.


Lower Floor.
Upper Floor.
Rock at the Tower Floor.
Rock at the Upper Floor.
OQ. Openings Communicating with the Lower Floor. (See Sections.)
RPQ. Doors of Houses—P and Q—are now built up. These two houses are destroyed.
N
W
E
S
Garden of the Austrian hospice
Cistern
Cistern
Cistern
Cistern
Cistern
Cave
House
Church of Ecce Homo
VIA
DOLOROSA

length. If we consider this line generally on my plan, we observe that it lies in a direction sensibly constant, only at about the middle of its course it makes a sharp turn at an obtuse angle, after which it resumes its original orientation. This is important, because the line has been cut nearly everywhere with the pickaxe, and is not a natural formation. This cutting is most visible in the Ecce Homo Church, and is found again in the rock of the house R, and in that of the adjacent houses Q and R'. In the house Q it seems now that the cutting has suppressed one of the walls of the chamber cut in the rock S. This result is a valuable indication for the date of this chamber, and the group of those of which it forms a part, a date anterior to the period of the cutting of the rock. (The vestibule Y has undergone a similar excision.)

If, now, we turn to the general section, and particularly to the small section, we may easily follow the slope of the rock from east to west in the direction of the slope of the street. The passage, which now debouches into space, might originally have opened



upon a layer of rock which has now disappeared, owing to the same cause which has destroyed a wall in one of the chambers.

Another general remark. The normal axes of the chambers and the direction of the passage form acute and obtuse angles with the present face of the rock, which could not originally exist, for it would be contrary to all known usage up to the present day in that kind of excavation.

In the passage on the left may be remarked a broad "notch," apparently indicating that the workman wanted to rectify the sinuosity of the passage. The square opening made at the end of the chamber P seems to communicate with another chamber filled with earth, which I should very much like to dig. It is a question whether this opening is not the original entrance to the cave, and whether a passage has not been cut afterwards from the inside, to attach the chamber V directly with the exterior. I must add that the conjecture is rendered difficult by the configuration of the ground, as one makes it out, the chamber appearing to plunge into the depth of the hill. On this hypothesis, we should have to admit that the chamber P communicates with another

chamber by the square hole, and that the chamber filled with earth had its entrance communicating with the exterior by the west face. In that case, the real primitive entrance of the group of chambers would have to be sought to the east of the Austrian hospice, near the second A in the word Mahometan in the O. S. map. We may, in fact, admit, without too much temerity, that the side of the hill turns and faces the west. All this, however, is purely conjectural.

If we pass to the examination of the lower chambers, we shall make the following notes. The people of the house told us that the chamber Q was provided with a bench cut in the rock; it is impossible to ascertain the fact now as the place is filled with ordure to the ceiling. The wall of rock, which we saw in the third house, appears to be in the alignment of the extremity of the rock of the neighbouring house, Q; there is, between the two, a solution of continuity of only a few metres.

In this third house the rock had been also excavated to make a chamber, partly destroyed. A piece of the ceiling of this chamber has fallen (section K L) through some movement of the ground overloaded with houses, or an earthquake. Most likely the latter was the cause, for the wall of the chamber is cloven vertically.

The Second Wall and ditch.

If now we search for the origin of this rock-work and the period at which it was effected, we are reminded of what Josephus says about the fortress Antonia, *which was separated from the Hill Bezetha*, not only naturally, but *by means of a deep ditch cut so that the foundations of Antonia were not at the foot of the hill and, therefore, easy of access.* The same historian informs us, besides, that the second wall, starting from the Gennath Gate, joined Antonia, only circumscribing the northern region.

The second wall, then, evidently starting from Antonia, must have been directed to the west, and turned its face to the north. Now, during the first part, it was exposed to the same inconveniences as Antonia in being commanded by Bezetha. To the same evil the same remedy was applied—the rock was cut, or the moat of Antonia extended. Can we not see in the face of the rock cut by the pickaxe, which we found behind the houses, the counter-scarp of the prolonged moat, cut to protect, not Antonia, but the second wall? It was not necessary to prolong the moat beyond the point where is now the eastern wall of the garden of the Austrian hospice, for at this point the base of Bezetha seems, according to our observations, to turn to the north, forming one of the sides of the great valley from the Damascus Gate, which the second wall must necessarily have crossed. In the eastern flank of this valley were excavated chambers, belonging, perhaps, to a cemetery, of which those chambers found by us formed a portion. In that case these chambers, cut across by the moat and consequently older than it, were probably more ancient than the building of the second wall.

These facts are of extreme importance in helping us to find the second wall; it seems to me that it must have passed between the two streets called 'Tarik as Serai al Kadim' and 'Daraj as Serai' in the Ordnance Survey map. Now all the west part of this place is occupied by a large

space of ground belonging to the Catholic Armenians, where I believe I could easily obtain permission to dig. Captain Warren has already sunk a shaft on this side in the street Harít el Wad, without results, but possibly he missed the wall by some few metres.

Tomb at Beit Sahur.

I resume my interrupted enumeration of our researches explained in the drawings sent off by the last mail.

I have only a word to add to my description of the sepulchre with a semicircle found at Wady Beit Sahur (No. 18). The form of the sarcophagus pointed out by me in the Haram (photograph D.) may be compared with the form of the trough of the first chamber, the inside of the sarcophagus being rounded at one end and square at the other. The sarcophagi coming from Jerusalem are generally square at their two extremities with a receptacle formed in one of the angles to support the head of the corpse.

Cemetery at Wady Yasoul.

I have already spoken of this valley, the name and direction of which are accurately given by Tobler (Jerusalem u. Seine Umgebungen II. 7). It lies at a few minutes' distance from the Holy City, and contains a vast cemetery, with many hundreds of sepulchres cut in the rock, which appears to have been a sort of *succursale* of the Jerusalem cemetery. We have visited a large number of the tombs, some of which are extremely important. As an illustration of the singular arrangement formed among them I may mention that sketched in plan No. 21, brought to light by our excavations.

Plate 19 represents a sepulchre. There is an *arcosolium* covering a bench in a lower chamber, which is connected with an upper chamber by the end of a loculus like an oven. On this bench is indicated by a light hollowing out the place where the head and shoulders of the corpse would lie. It is only the second example of this kind that I have found in the tombs round Jerusalem. Immediately below the bench and in the vertical wall were cut two little alcoves to receive bones. When we opened the tomb I found these alcoves and the four oven-like recesses still closed by slabs wedged in with small stones; they contained nothing but fragments of bones.

Plate No. 16 shows another tomb also excavated by our men, in which we remarked the following points: three little recesses, like those in the former, serving as depositories for bones, the third of them consisting of a small grave cut at the end of a loculus, and closed by two slabs of black stone with a layer of cement interposed; within were bones and the skull of an adult. In the wall at the end, above and a little to the left of the entrance of the central loculus, a *little cross carved*. In the corner of No. 5, on the bench, fragments of sarcophagi of well-known type; in the opposite corner (H) fragments of lamps in terra cotta: two of the recesses were furnished at the end and laterally with two boxes at right angles with them, one of which, still closed with a slab, contained fragments of bones. This tomb has certainly been used again, perhaps at the period when the cross was engraved.

Plate 17 reproduces the details of another tomb of greater importance, because it was partially inviolate.

The first chamber has nothing remarkable except the great irregularity of the loculi, and the strange deviation of one of them, which pierces the wall of a loculus of a neighbouring chamber at the same level. In the middle of this first chamber, furnished with a bench, is a rectangular grave, through the pierced wall of which is access to a little lower chamber. The entrance was closed by a slab. It is very small, and has an ornamentation quite different to that below which it extends. The ceiling forms a low arch; right and left stand two walls cut in the rock, and forming two troughs, each of which is divided into two parts, one by a diaphragm of rock, the other by a slab placed vertically. Between these two troughs is a kind of empty passage, almost entirely filled with earth; the lid of a little sarcophagus in soft stone placed transversely towards one of the two extremities, forms a small partition. Three of these "boxes," G, H, P, contained the bones of at least three skeletons.

To the right of the entrance had been cut in the vertical wall a very small recess, where we found an ossuary of soft stone (F) without a lid, filled with bones; sides bare: made to be closed with a groove; with feet; the lid forming the partition I fits it perfectly.

To the left of the entrance is hollowed out another recess, divided into two parts by the rock forming its diaphragm. In the left division stood an ordinary ossuary, placed parallel to the diaphragm; no feet or grooves; bare sides; the lid broken by the fall of a piece of rock; bones in it. At the side of this ossuary, and at right angles with it, another ossuary, B; bare sides; no feet; lid with grooves; bones, among others two skulls placed on the surface, at the two ends of the ossuary.

Ossuary, ornament with Hebrew inscriptio

In the right division, ossuary C, parallel to the diaphragm, ornamented with roses and an elegant framework of traditional type; ornamented sides relieved with red; feet; flat lid; no leafwork; on the small face a Hebrew inscription in *graffito;* bones. Behind this ossuary and in the same direction, is the fifth ossuary, D; a rose simply designed; feet; leafwork for lid; no lid; bones. The lid has been used to raise at the side an upright partition forming a new recess, serving for an ossuary, and containing a number of bones. Without doubt this unviolated chamber has been used a second time, at a very ancient period; the adaptation of two of the lids into partitions serves alone to show it. We took great care in collecting together the bones of the earlier occupants of the sepulchre. These sarcophagi are undoubtedly more ancient than the second use of the tomb, which agrees perfectly with the existence on one of them of a Hebrew inscription. In my next report I will give you the inscription. The absence of any glass or pottery is very remarkable.

VIII.

JERUSALEM, *March* 19, 1874.

Greek inscription i the wall of the city.

I have paid a second visit to the Greek inscription which I had previously observed in the wall of the city, quite close to the gate of Saint

Stephen spoken of in my last report. I tried to take a squeeze, but there was so high a wind that I failed to get anything good; at the same time, thanks to a ladder, I was able to examine the text closely and to take an exact copy, after carefully cleaning it. The following is a reproduction of the inscriptions made by the aid of the copy and the squeeze:—

ΕΚΟΙΙ
ΥΠΑΤ
ΟΥΙΜ
+ ΠΙΟC

The stone, cleaned of the mortar which plastered it up, showed a little cross engraved at the beginning of, and a little above, the fourth line. The inscription, then, is Christian. It appears, also, to be a funerary inscription, judging from the first word, which we may restore as *ἐκοιμήθη* "here lies," a word often recurring in sepulchral formulæ of Christian times, from which is, of course, derived the word *κοιμητήριον* cemetery.

The word which begins the second line, ΥΠΑΤ, may mention a consul or proconsul (*ὕπατος*), or it may be the name of the deceased person. ΟΥΙΜ in the third line may be separated into *ου*, the genitive termination, and *ιμ* the beginning of a name, or it may be the Greek way of writing a Latin word beginning with *vim*. In the fourth line the second letter is perhaps an R, and the fourth an S or an E. In the former case we have the preposition *προς*.

Greek inscription near Ain Yardé.

A fellah of Abu Gosh has just told me of an inscription between Kubeibeh and Tell el Gezer, not far from Ain Yardé. He showed me some letters rudely copied by him, but it was easy to recognise the characters. I made out ΑΔΙΚΙΟΝ, perhaps Αδικιου (?) I propose to visit the place and see it.

The Legend of the Fenich.

I gathered from the same fellah further information about the *Fenich*, in whom I proposed, some years ago, in a note sent to the Institute, the Philistines. The Fenich king, or the King of the Fenich, had his summer residence at Souba, and his winter residence at Rathoun or Latroun. He had several brothers, one of whom lived at Sara in summer and at Beit Alub in winter; another at Beit Our in summer and El Bourdj in winter; another at Beit Jibrin, &c. I shall, perhaps, return to this common popular legend of the Fenich, to which I have been the first to call attention.

Kuryet.

This resident of Abu Gosh told me that his village, Kuryet el Enab, was the Kuryet *par excellence*, called so without any other qualifying name. He told me, besides, of a place not far from Yalo called Hérché, which means forests; one cannot help being struck by the singular resemblance of this word with the Hebrew Hareth, the name of the forest which served as a refuge for David (1 Sam. xxii. 5, "Then David departed and came into the forest of Hareth.") The *shin* and the *t* are constantly interchanged in Hebrew and in Arabic; the other letters are identical. If it is not the Biblical Hareth, there would be

The Forest of Hareth.

nothing impossible in its being that which passed for it in the time of Eusebius and St. Jerome, for the Onamasticon places an Arat, which it identifies with Arith, David's place of refuge, west of Jerusalem.

Perhaps we might connect with this place the name of Mount Heres of Judges i. 35—"The Amorites would dwell in Mount Heres in Aijalon, and in Shaalbim"—shown as occupied by the Amorites, and whence it seems that Aijalon and Shaalbim were also, according to the literal tenor of the verse. I know that some think that "Mount Heres" is really *Irchemes, City of the sun*, but this supposition is quite gratuitous and may easily be refuted. The question is too complicated for me to solve it *en passant*. I hope to return to it.

The same peasant told me that there was at Amwas (*Emmaus*) a well now closed, whence formerly the plague issued to spread over all the world; this well is called *Bir et taoun*, the *well of the plague*. It is easy to find the origin of this tradition, which has a historical foundation. The terrible epidemic which desolated the Mussulman army after the conquest of Syria by the lieutenants of Omar, of which mention is so frequently made in the chronicles of Arab historians, is called by them the Plague of Emmaus, probably because the first cases broke out there. To localise the birth of the scourge, and to make it spring from a well, is but one step. The Well of the Plague at Amwas.

I had already ascertained the existence of a fountain named Ain Nini, at Amwas. My fellah confirmed the fact. May we recognise in the name a truncated echo of the old word Nicopolis? Ain Nini.

There has been, probably, some confusion in the publication of these travelling notes, written apparently at different periods and in different places. It is desirable that the names belonging to each region should be classified and grouped, in the interest of future explorers east of Jordan.

Permit me to insert in my report certain observations which have been suggested to me by reading over again a list of names published in the *Quarterly Statement* of July, 1872. It is a list collected by Captain Warren, and examined by MM. Sandreczki and Palmer. The places are given as east of Jordan. In fact, the first pages (123—164) appear to belong to this region. I will add as well Jebel Atarus, written Atrud'—the Ataroth of the Moabite Stone—and mentioned immediately before Zuka Main and Moudjib. But at page 144 we leave the trans-Jordanic country, and get an enumeration of places belonging to the environs of Jericho. Again, at page 167 we are transported to the west of Jerusalem, to judge by the juxtaposition of such names as *Deit Atab*, *Saide*, *Soba*, *Neby Danyal*, etc.* Observations on the list of places east of the Jordan, published in the *Quarterly Statement*, July, 1872.

Certain Arabs of the city, fired with archæological ardour by my recommendations, have just extracted from a tomb in the neighbourhood of Jerusalem four ossuaries of ordinary type in soft limestone, three being ornamented with roses. One of them, without roses, bears on the edge Newly-found ossuaries with Greek and Hebrew inscriptions.

* M. Ganneau's remark is correct. On republishing these lists they will be properly separated.

of one of its faces the name ΑΤΙΓΟΝΑ, which is, probably, the equivalent of *Ἀντιγόνη*. Is the omission of the N the fault of the engraver? I should be tempted to attribute it rather to a voluntary suppression, the result of a common custom in Jewish orthography. The assimilation of the letter *n* with that which follows it is a constant fact in Hebrew. In virtue of this phonetic law, for instance, we write *bat* for *bant*, *benet*, *daughter*. It would not be extraordinary if this, an organic law of the language, were applied to proper names borrowed from the Greek. I have already* pointed out a very remarkable instance, for the letter r, in the Hebrew transcription of Bennigi for Berniki (Veronica). The word before us may have undergone exactly the same transformation, only it would have been in conformity with the Hebrew usage to write ΑΤΤΙΓΟΝΑ; the *n*, which disappears, would be replaced by a double *t*. The name of Antigone was extensively used by the Hellenising Jews. The regular form is ΑΝΤΙΓΟΝΟC, but we find also ΑΝΤΙΓΟΝΑ, for example, in the monument of Patron (Greek Inscriptions of the Louvre, No. 240), where in a group of eight names figures an ΑΝΤΙΓΟΝΑ immediately after a ΜΑΑΧΙΨΗ (The last name has an unmistakably Semitic appearance, and these two persons were very probably of Turkish extraction). ΑΝΤΙΓΟΝΑ is, perhaps, the feminine form of ΑΝΤΙΓΟΝΟC, and in the monument of Patron as well as on our own ossuary we have two women. The Hellenising Jews, however, affected the genitives in *alpha* for many masculine names, which they brought to the termination *ας* in the nominative, as *Ἀρτεμᾶς*, *Θευδᾶς*, *Κλεοπᾶς*, for *Ἀρτεμίδωρος*, *Θεόδωρος*, *Κλεόπατρος*. It is true that this systematic alteration was in general preceded by a contraction which we do not find in *Αντιγονα*.

The second ossuary bears on the upper part of its long side, which is ornamented in characters legible but more cursive than those of the preceding, the name ΕΥΤΡΑΠΕΛΟΥ in the genitive. I do not know if the adjective *εὐτράπελος* (*versatile*, *gay*, *clever*) has ever before been met with in a proper name. As it is of two genders it is difficult to say whether the name belongs to a man or a woman, most likely the former. It is probably the translation of some Hebrew name having the same signification, and it makes us think of the names *'Adna*, *'Adnah*, *'Adin*, *'Adino*, etc.

Elashah. The third ossuary has on the back face, opposite to the ornamented side, a graffito in square Hebrew characters, broadly traced by means of a point which appears to have been notched. The letters, though cursive, are written by a sure and practised hand: they read *Elashah*. The name, which signifies literally "created by El," is borne by several persons in the Bible, notably by a priest who in the time of Esdras had married a Gentile woman (Ezra x. 22). Another of the same name was sent by Zedekiah to Nebuchadnezzar at Babylon (Jer. xxix. 3). The characters, as in writing, are uniformly inclined to the right. The "lamed" is formed by a long *haste* without a hook. I have already

* "Nouveaux ossuaires Juifs." A *mémoire* read before the Academy of Inscriptions, and published in the *Revue Archéologique*, 1873.

found several instances of this form used in epigraphic Hebrew. On one of the small faces of the same ossuary is engraved another Hebrew inscription much less easy to make out. The first letter is a long vertical stroke like the *lamed* of the preceding: then comes a complicated group which appears to be formed by the combination of two characters. There are the complete elements of an *aleph;* but this letter once pulled out, it is very difficult to do anything with the remaining strokes;—a tsade? a teth? If we admit, on the other hand, that there is a stroke common to the two characters, this complexity resolves itself into an aleph + chin. As to the last letter, it appears, from its prolongation below the line, to be a *nun* rather than a *lamed*. None of these probabilities give us very happy results, and I do not very well see, for the moment, how the word is to be read.

We have not been able to take squeezes of these texts, but have contented ourselves with the sketches (Pl. 33, B C D E) forwarded herewith. The proprietors of the ossuaries have the most extravagant ideas of their value.

The tradition of the wasps.

The Bedouin legend of Joshua, given in a previous report (p. 87), says that the pagans of Jericho were finished off by wasps sent from heaven. This is entirely Biblical, and reminds us strikingly of a passage in the Wisdom of Solomon, xii. 8, in which the writer is speaking of the Canaanites and their sanguinary rites. "Nevertheless, even those thou sparedst as men, and didst send wasps, forerunners of thine hosts, to destroy them little by little." And we may compare the passage (Deut. i. 44), "The Amorites, which dwelt in that mountain, came out against you, and chased you, as bees do, and destroyed you in Seir, even unto Hormah." Not only the image, but the words also, are identical in the Hebrew and the Bedouin story. To the same order of ideas belongs the passage in Isaiah (vii. 18)—"It shall come to pass in that day, that the Lord shall hiss for the fly that is in the uttermost part of the rivers of Egypt, and for the bee that is in the land of Assyria"—and that in Ps. cxviii. 12, "They compassed me about like bees." The Hebrew word *deber*, derived from the same root, signifies extermination, and was used particularly for the plague, which attaches itself by preference to armies. The Arabic word *dabra* applies especially to the flight of a defeated army. It is very possible that these different significations, sprung from the same root, are connected with each other by the metaphorical bond which I have thought it best to explain.

Kubbet es Sakhra.

At last we are able to send you the results of our examination of the balustrade of the Kubbet es Sakhra, and of a certain number of the bases belonging to the columns of the edifice. This work has cost a great deal of time, and has been necessarily delayed. We have at least the satisfaction of forwarding precise and definite information on these important parts of the mosque, only recently discovered and already beginning to disappear. With the photograph you have already received, and the five plates sent with this (Nos. 28 to 32), containing M. Lecomte's drawings, you will be able to attack with profit the interesting questions

raised by these unlooked-for facts, facts which may throw precious light upon the much disputed origin of this monument.

Bases of the columns in interior.

See Plate 31. During the course of the repairs several columns of the intermedia peristyle of the Kubbet es Sakhra have been laid bare by the removal of the marble casing which covered up the base. One of these columns has even had its abacus partially exposed, as I stated in my previous report. M. Lecomte will probably be able to send a drawing of it by the next mail.

By reference to Plate 2 of the Ordnance Survey the positions of the columns examined can be easily ascertained: A, column S. of the S.E. face; B, column N. of the same face; C, column S. of the E. face; E, column N. of the same face; F, column N. of the N.E. face; I, column of the S. face, represents a column and a base, having already undergone a restoration which will very soon cover up all the preceding.

The other bases of the intermediary peristyle have not yet been stripped of their old covering: as to that of the interior perimeter none has yet been touched. We wait impatiently for the moment when they will undergo this operation.

A glance at the drawings will show the form of their bases better than any description. It suffices to show one positive fact: that they are heterogeneous. We cannot certainly deny that there is a great resemblance in the profiles A, B, C, if we only consider form; but the proportions, sensibly different for each of these three bases, do not permit us to refer them to a single type. Besides, they vary in every case absolutely from the base E, as much in the dimensions as in the disposition of the mouldings. Finally, the marble in which they are cut is not of the same kind for each.

The aspect of the bases fully confirms (what the variety of modules in the columns above them might teach us) the opinion of those who see in the primitive building ancient materials from various sources used over again. This use, which seems very improbable in an ancient work, even of late period, is on the contrary quite in accordance with Arab customs. It is clear that if the bases and columns, whatever their absolute age,* had been specially made for the Kubbet es Sakhra, they would all be alike. The builders would have no interest in seeking for the absence of symmetry, which shows itself not only in the variation of profile in the bases, but also in differences of thickness and height in the shafts. No caprice, no supposed intention, can account for the last and grave irregularity which the sketches show. It was so striking that it fully justifies the adaptation of these false bases, which are at least regular, formed of marble slabs; it is very probable that from the very beginning the deformities of the halting columns had been disguised by

* This absolute age is difficult to determine, for it is dangerous to apply to Palestine, still so little known, rules exact, perhaps, for other places. M. Lecomte thinks that the form of these bases might go back to the sixth century in the East, and come down as far as the tenth in certain parts of the West (Lombardy, for example).

this dress of marble, and that this remedy is as old as the evil. The value of this fact is proved when one reflects that these bases and these heteroclite columns support a wall ornamented with mosaics, dated from the year 72 of the Hegira (A.D. 691), that is, the very year of the first construction of the Arab edifice.

Bases of exterior columns.

Plate 29. Bases of exterior columns. To complete this group of bases, M. Lecomte has made notes of three others, which are found outside the building, to the right of the east and north porches (the gate Neby Daoûd, and that of Paradise). We know that these porches have been added to the building, and are not an integral part of it. Consequently, we cannot draw any conclusions, in the sense of the preceding, from the aspect of these bases. Nevertheless, they deserve, by their singularity, to be brought to the attention of architects.

G is on the north side, and H on the south of the eastern gate (Ordnance Survey, Plate II).

D is on the west side of the north door.

They are in one block, and show a bastard profile, formed by mouldings, which are complicated and do not belong to any determined category. They present one curious detail, on which M. Lecomte rightly insists, because it may put us on the path of their origin. The higher part of the base surmounting the pedestal has one of its faces lightly curved, as the sketch of the base G shows, in which the *tore deborde* on the vertical face of the plinth. These bases, although different in detail, appear to belong to one building, and the same part of the building, perhaps circular.

Arcades of the external wall of the Kubbet es Sakhra

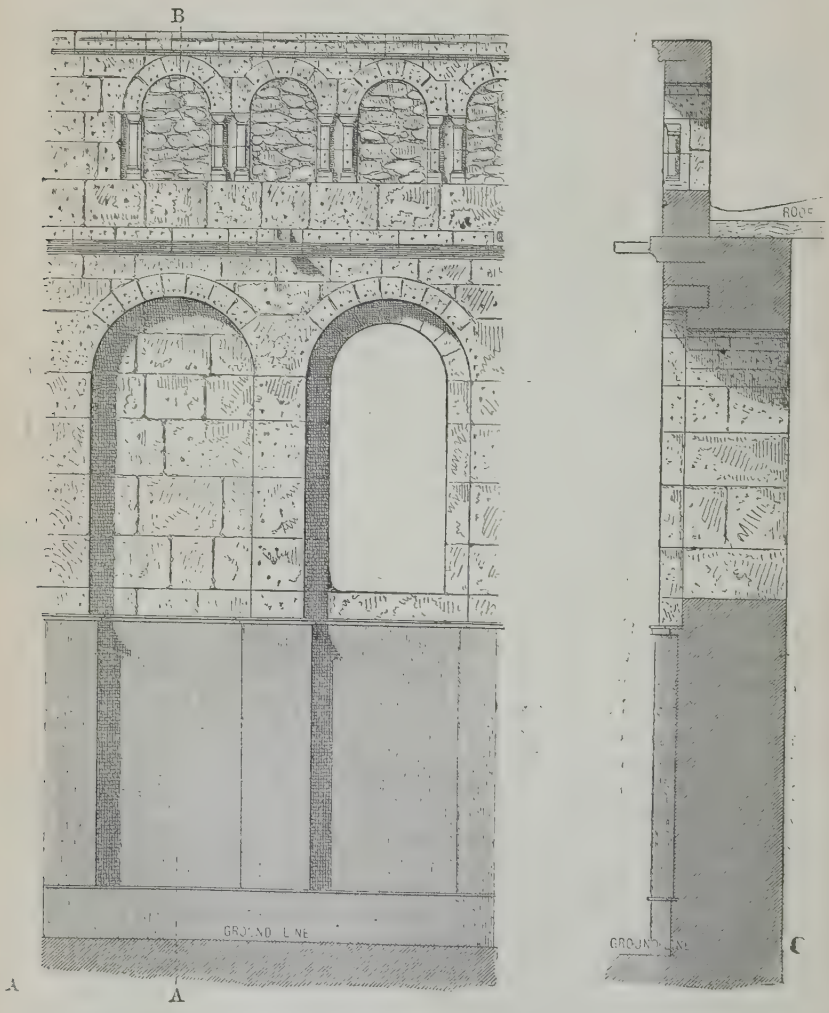
Plates 28, 29, and 30, give the *ensemble* and the details of the exterior wall of the Kubbet stripped of its tiles.

The elevation on the scale of 1-100th shows two of the sides of the octagon, the west and the south-west. At the right extremity of the south-west side has been shown a portion of the tile covering, to show the way in which this interesting and unsuspected arrangement was masked. If we begin by studying this latter face, we shall remark that the wall is pierced by seven high and narrow semicircular arches (a fact already known), of which the upper half forms the bay of the windows lighting the interior. The lower half is solid, and covered with a plating of marble; the bays of the two arches at the extremities are blind, and not blinded, as the arrangement shows. Above the great arches runs a projecting band, which gives passage to six leaden gargoyles, by which the rain-water runs out above the six piers. This band is surmounted by a high course, which supports a series of small semicircular arches, resting on *colonnettes* grouped two and two.

These arches, of which there are thirteen on each of the two sides seen, have been closed *subsequently* to their construction. In fact, (1) the side of the wall which fills them up is in the same plane as the general face of the wall and the cutting of the capitals of the columns; (2) the columns are in fact part covered up by the filling in; (3) the filling in is effected by stones quite different from the rest of the building; (4) one of the arches

in the west front has been opened, and has given evidence that it was originally destined to be always so.

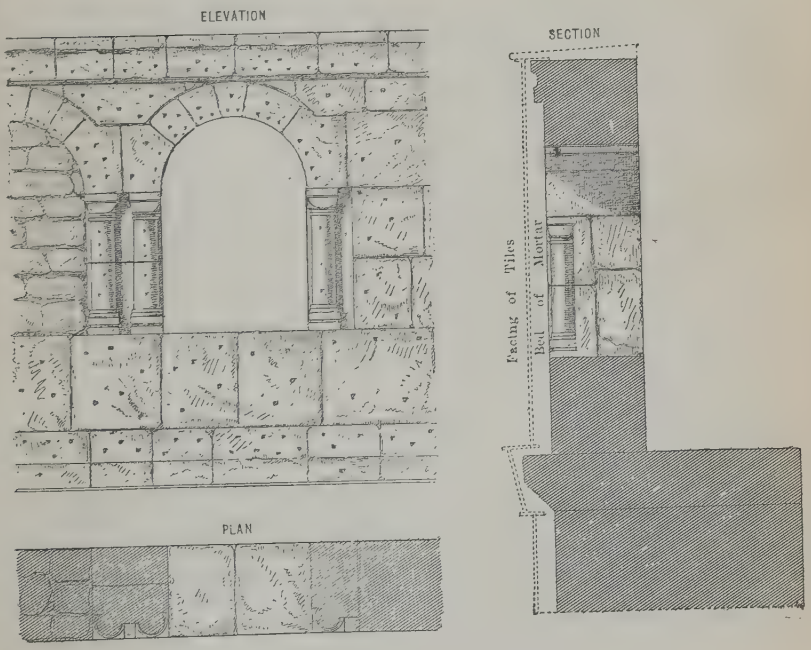
Lastly, immediately above the little arcades, at a tangent to their extrados, runs a terminal cornice, the profile of which is extremely difficult to arrive at, so much has it suffered.



The western face shows the same arrangement. We remark only that the last of the higher arches on the right extremity has been opened during the works, and that the great central arch which serves as the door

is broader than the six other arches. This breadth has been secured by the narrowing of the bays, the breadth of the piers remaining sensibly the same. The proportions of the higher arches remaining unaltered, there results a general difference between the west and the south-west faces; in the latter the higher arches are calculated in such a manner that their axis, two by two, corresponds with the axis of the arches below, if we count 1, 3, 5, 7, 9, 11, 13; with the axis of the piers if we count 2, 4, 6, 8, 10, 12. In the west face, on the other hand, this correspondence does not exist.

The drawing represents in stippling the projection of the porch, which



is supposed to have been taken away to show the original entrance. The surface of the blocks of the whole construction has a good deal suffered. It, is, besides covered with holes, serving to fix the casing which covered it. As a result, the dressing (tool marks) has almost wholly disappeared; we have, however, been able to ascertain that the dressing is not that which I have shown in a previous report (see p. 136) to be mediæval. The only lapidary sign which we have noticed is one spoken of in my last report (p. 136); it is engraved on the third course of stones, below the left abutment of the third great arch of the western face, starting from the left. It is, as may be seen from the copy of it in Plate 28, too

indeterminate in form to permit us to attach it to one epoch rather than another.

Plate No. 29 represents the detail of the opened arch, and plate No. 30 gives the details of the columns, base, and capital, in full scale.

It is more than probable that the six other faces of the octagonal wall, still concealed by the tiles, would show exactly the same respective disposition as these two, if they were also stripped.

Starting from the band, the wall in which the higher arches are built is much less thick than the great wall on which it rests; this appears to indicate that it has originally been treated as a lighter construction, not having so much to support.

The existence of these arches running all round the monument reveals to us a previous state very different to the present aspect, and raises curious historical questions.

Above all, we should take account of two essential facts: (1) the arches are semicircular; (2) they were originally destined to remain open.

This fact established, if we try to determine the date of this building exclusively by the aid of technical considerations, we shall be much embarrassed. We may nevertheless hold for certain that the whole wall, from the higher arches *to the half of the lower arches*—that is to say, in the whole of its height which has been exposed—is, in spite of the differences of thickness, of homogeneous construction, and can have only one date. As for the part below it is difficult to pronounce. The casing of marble hides the true wall, except at the right feet of the gate of the western face, where it seems to show that the wall is entirely the same from the top to the bottom.

Besides the absolute age of the construction, it remains to fix the period of the transformation which it subsequently underwent, and which led to the stopping up of the upper arches. It is evident that the transformation is at least contemporaneous with the decoration of the monument by means of the tiles placed upon the wall: the beautiful *sourate* of the Coran (Yasin) in white letters on a blue ground, which runs all round the eight faces of the octagon, passes away nearly in the middle of the arches *d'en haut*. Although the employment of these tiles, called *Kechany*, is of different dates, there is a general agreement in fixing the first application of them in the sixteenth century. It is easy to understand that the decorators, in trying to get as large a surface as possible to cover with their enamelled tiles, thought of gaining this surface at the expense of these closed arches, which had perhaps a long time before lost their *natural use*, and which were treated as a higher prolongation of the wall.

ches and eries of *Tem-* *m Domi-* n the e of the saders.

What was this natural use? To answer this question we must go back six centuries, to the time of the Latin kingdom of Jerusalem. We have several descriptions of the *Templum Domini*, made by contemporary authors. Among these descriptions there are none more exact and more detailed than that of John of Wirzburg. Unfortunately, I have not with me the original text, and I quote from the partial translations of

Tohler and De Vogüé the following important passage: "Between the external wall (pierced by four doors and by windows) . . . . . and the interior columns (12 + 4) supporting the interior wall, less broad, higher, and pierced by twelve windows, there is a row of sixteen columns and eight pillars. This circle of columns supports a roof which joins the interior to the exterior wall, and a ceiling ornamented with beautiful *caissons*. *The roof is surrounded by a continuous gallery, with pipes of lead to carry off the rain water.*" This description applies admirably to the monument in its present state, and proves how few were the essential modifications which the Kubbet es Sakhra has undergone since it ceased to be the *Templum Domini*.

As to the valuable detail which terminates the description of John of Wirzburg, it appears to me to exactly correspond with the description brought to light by the repairs. Here is Tohler's translation, in his own words: "Am unterm Dache war ein Rundgang zum Lustwandel und bleierne Rohren schenkten das Regenwasser aus." The lower roof is that properly so called in opposition to the cupola; the *Rundgang zum Lustwandel* is a gallery running round.

There is no possible doubt our arches are nothing else than a little portico surrounding this gallery; the inclined roof would, at its lower end, approach the horizontal, or, at least, stop suddenly to permit a passage, which would not need to be very broad. The breadth of the lower wall (1 metre, plate 28, section A.D.) is of itself sufficient. A spout and leaden pipes, corresponding with the present gargoyles, would suffice for the rain-water to pass away.

A man standing upright in the internal wall is just able to look without by the bays of these arches, whose height, measured from the summit of the arch to the base represented by the great wall, is at least two metres.

It is not necessary to remark how this explanation accounts for the existence, and justifies the utility of this little portico, which, later on, closed and transformed into a wall, seemed to have no reason at all for existence, and gave to the right faces of the octagon the unpleasing appearance of eight panels cut out in cardboard. Unfortunately, the repairs follow the same error, and this light colonnade, exposed for one moment, will again be transformed into a massive wall, this time not even having the excuse of bearing the elegant fayence of Soliman.

Henceforth we may hold for certain that such was the disposition of the *Templum Domini*. I will add that we may see a vague but real confirmation in the reproduction of this edifice which figures on the seal of the Templars; there are clearly to be distinguished two rows of bays superposed.

Disposition before the time of the Crusaders

This gallery, adorned with porticos still in use at the time of the Crusaders, the traces of which are now wholly lost—did it exist before their time? I think that we may, without hesitation, reply that it did, for plenty of reasons: the absence of mediæval dressing, the use of the semi-circle, the historical certainty that the Crusaders have never interfered

with the work, as a whole, of the Khubbet es Sakhra, the homogeneous nature of the arcade and the wall which supports it.

To these general reasons one more precise may be added. A Persian author, Nasir ibn Khosrou, who visited the Khubbet es Sakhra in the year 438 of the Hegira, that is to say, some years before the first Crusade, describing the exterior wall of the Khubbet, says that it was 20 "yards" high and 33 long, on each side of the octagon. I have not the original here, and forget what was the exact measure called by the English translator, Major A. R. Fuller, a yard, consequently I do not know the real dimensions expressed by the author. At any rate, the proportion of height to breadth was as 20 : 33. Now these dimensions are actually 12 and 27 metres. In order that the ratio of Nasir's dimensions should be as 1 : 2, there wants 7-66ths; in order that the ratio of the actual dimensions should be as 1 : 2 there wants 1-18. Now, the difference between 1-18 and 7-66 is only 5-99, a difference so small that we may neglect it, and conclude in consequence that the wall before the Crusades was the same height as it is now. And we have seen above that it may be considered as produced at a single effort.

As to the period which extends between this epoch and that of the *first construction*, the field is still open to conjectures as to what concerns this part of the monument.

If we wanted to find examples of analogous dispositions we might, as M. Lecomte suggests, find the *point de départ* in certain edifices of central Syria, towards the fifth or sixth century. As to relations with other places, we might multiply them, but without great advantage to the chronological elucidation of the special question which occupies us.

I have other and important observations which the repairs in the Haram have enabled me to make. These bear upon the works executed by the Crusaders in the sacred enclosure; but time presses, and I must defer them to the next mail.

IX.

JERUSALEM, *April* 19, 1874.

yer of nt Imple- uts north Jerusa- n.

IF, leaving the place called *El Mesharif* to the north of Jerusalem on the Nablus road, the name of which is the equivalent of Scopus (see my preceding reports), you turn to the east, you find at about two hundred metres' distance certain mounds or hills called by the fellahîn *Rujm el B'hîmé*, literally, "the heap of the animal." The thing that gives particular interest to these hills is, that they are entirely composed of a prodigious quantity of flint chippings.

We have only as yet devoted one visit—that very rapid and necessarily superficial; but it results from this first examination that these mounds of elongated form, and representing thousands of actual metres, ought to be thoroughly explored. How to explain this enormous mass of flint

broken up small? A few steps farther on crops up the very rock from which these fragments come. With what object did they cut up the rock into these tiny pieces? The collection in heaps may be explained: it was perhaps done to clear the ground and to facilitate cultivation. But how to explain the formation of the fragments? I thought at once, and I am still tempted to think, that we have here a workshop of flint implements. The existence of tools and arms in flint at different parts of Palestine is a fact beyond all doubt. It is enough to recall the authentic finds at Beit Sahur, near Bethlehem, and at Gezer. We may note as well that the flints from both these localities, far apart from each other, are, as regards form, identically the same; a fact which would lead us to suppose that the flint instruments came from certain centres of fabrication, and were thence sent into the rest of Palestine. This mode of production seems very probable when we observe that layers of flint suitable for the purpose, and in abundance, are distributed over certain regions, and that it is therefore probable that the work would take place near the material.

Are we then to see in the *Rujm el B'hîmé* the waste chippings of one of these primitive manufactories which supplied the land of Canaan? One would hardly dare to affirm this, but I am not far from believing it. We passed some time in searching on the surface of the mounds for specimens of cut flints. We found quantities which seem to have been roughly prepared; others which seemed to have been commenced and abandoned; not a single specimen perfect, or so perfect as to be pronounced with certainty a weapon or a tool. I intend to excavate these mounds, and perhaps a few crucial incisions will throw some light upon this interesting question.

Local tradition of the Lifta people calls the place the site of an ancient city, or rather of an ancient inhabited place; but it is silent as to the flint, and contents itself with calling the chippings *souwanāt* (flint). I forgot to say that we found on the surface some fragments in terra cotta.

Inscription at Kubeibeh.

A fellah of Abu Gosh, the same spoken of in a previous report, has brought me a rough copy, made by himself, of an inscription at El Kubeibeh:

CIIOIXI
ARV II

Difficult to get anything out of this; but it seems like a Latin inscription on account of the R. The X would then be a numerical sign. Have we some inscription of the Tenth Legion, or is it a piece of a Roman milestone? It is interesting on either hypothesis. As soon as time permits I will examine this inscription, as well as that of Ain Yardé. The same peasant spoke to me of a sarcophagus with three rosettes which is at El Boueirè. It is something else to visit.

Fragment of inscription at Beit Sahur.

I have seen and made a squeeze of a fragment coming from Beit Sahur et Ati'ga. It contains nothing but three Greek letters of Byzantine appearance—ΗΠΟ, with a large character underneath, like an A laid horizontally.

Greek inscription from the land of Ammon.

I received a visit from a trans-Jordanic Bedouin, Jasem, son of Sheikh Goblan, who, besides giving me certain curious information, brought me the squeeze of a Greek inscription in the Wady el Katar, west of Khan es Shib (lat. 31 degs. 25 secs., long. 36 degs. 9 secs.).

ΦΙΛΟ
ΗΟΥΑΓΡΙΠ
ΚΟΚΚΗΙΟΥΑΚ

κοκκηιου would be the genitive of the Latin Cocceius. The Cocceian *clens* was an important one; the Emperor Nerva, and the historian, Dion Cassius, both belonged to it. The squeeze is as good as a Bedouin can make it; that is to say, detestable, and the characters are hard to decipher. Perhaps the word φιλο is part of an official title, such as φιλοκάισαρ, φιλοδῆμος, or φιλορωμαῖος. In this case it is a great pity that this word is lost, because the inscription would then have a great historical value. At times the second line looks like as if it contains the name Agrippas.

Lastly, a peasant sold me, with a lot of terra cotta coming from Wady Beit Sahur, a fragment of soft stone, with certain characters, which seem to have been written with the point of a knife.

The Well of the Pest at Amwas.

Apropos of the *Bîr et-Ta'oun* at Amwas, of which I have spoken already, here is a remark which occurred after I wrote my account of it. I have already explained the origin of this legend of the Well of the Pest, but very likely another tradition has been engrafted on the former, relating to the closing of the well. The passage in Sozomen has often been quoted which mentions at Emmaus Nicopolis, identified with the Emmaus of the Gospels, a source situated at the intersection of three roads, and endowed with miraculous healing powers, which it owed to the touch of Christ.

This miraculous fountain was closed by order of the Emperor Julian, in order to suppress the Christian belief which was attached to it. If Amwas be really the Emmaus of Saint Luke, would it be rash to consider the legend of Bîr et-Ta'oun, closed as it is, a confused amalgam of reminiscences relating to very different events—the suppression of the beneficent source, and the appearance of the epidemic called the pest of Emmaus? Perhaps an inquiry made on the spot will furnish me with more precise information on this point.

Malha.

I have just made an excursion to the village of Malha, south-west of Jerusalem, where I picked up a little information not without its value. There is nothing very curious in the houses, except a ruined burj near the mosque. I remarked in the angle of a house not far from it a broken inscription, very faint, perhaps only a flourish. Inside another house I was shown the entrance, now closed, of a cavern, the door of which would have borne an inscription. The approaches to the village, and the little hill which rises before it (same orientation) are filled with tombs cut in the rock, one of them containing fragments of ancient pottery. They showed me a kind of long box in dried earth, with rounded angles, found probably in one of these tombs, full of bones.

It measures very nearly thirty-six inches in length, and looks like a small bath. I propose to go and open one or two of these tombs.

According to a tradition of the Mawaleh, or inhabitants of Malha, they may be divided into two categories of different origin: the one coming from trans-Jordanic regions, the other from Egypt.

Their pronunciation is something quite peculiar. It is chiefly characterised by the sound of the long *a*, which is very full, and closely resembles the sound of *o*.

The water of the fountain, Ain Yalo, a little distance west-south-west of Malha, enjoys a great reputation. The Mawaleh, when they wish to praise it, say that they weighed its water in the Mijan, and found it lighter than gold; which does not prevent it from being heavy for drinking.

The immediate environs of Malha contain many localities which appear to be of importance: for example, Khirbet el Fowagesi, on a hill, whose terraces in stages can be seen from Ain Yalo. A little more to the east is a place called *Q 'la es sounwan*, the *rocks of flint*, to which is attached a singular legend. It was formerly an inhabited place; but the people having drawn on themselves the wrath of God, the whole region was transformed into flint. The sin committed was that the women did not use the bread for the nourishment of their children. I do not see what lurks beneath this story, unless it be some relation with the use of flint by the Canaanites in primitive ages. I shall see when I visit the place if it shows any traces of the working of stone.

Tumuli.

The Mawaleh have pointed out to me, not far from Malha, three great mounds, on the *Jebel et-tawagi*, west of the village, Rujm Afanil, Rujm Ataya, and Rujm et-Tazoûd. They are probably the three tumuli indicated by Prokesh and Tobler (Topog. 761), on the left hand of the road from Malha to Ain Karem. The *Darûd* of Tobler must be my Tarud. I see, too, that Mr. Drake (*Quarterly Statement*, Jan., 1874) speaks of these tumuli, which he names El Atyya, El Tarud, and El Barish.

Malkhaya.

The position of Malha, and the numerous tombs which surround it, are enough to indicate that we must look for an ancient locality near it. Up to the present no identification proposed appears either happy or important. The best known is that of Schwarz, which has been generally repeated. Malha would be mentioned in the Talmud under the form Malkhaya, as the country of a certain Rabbi José. From a phonetic point of view this identification is very well; but it has no historical value at all, this being the only place where Malkhaya is mentioned at all. Some authors have even doubted the exactness of this otherwise insignificant connection. Thus Neubauer, in the "Geography of the Talmud," remarks that the Talmudic Malkhaya must be looked for in Upper Galilee, because this Rabbi José is named in the passage with another rabbi coming from Sikhnîn, a place undoubtedly Galilæan, and he recalls the fact of the existence of a town called Malha in the neighbourhood of Cæsarea.

Caphar Gamala.

Tobler, not without hesitation, in which he is right, compares Malha with Caphar Gamala, the place where the body of St. Stephen was found by a certain Lucian. (Top. 101.)

Caphar Melich.

Its connection with the Caphar Melich of the Cartulary of the Holy Sepulchre (pp. 90, 93), would be more acceptable phonetically; but we must not forget that Caphar Melich is mentioned with Anquina (?)

I shall propose, in my turn, with some confidence, a new identification of Malha, which, if it is admitted, will have the advantage of solving one of the lesser problems of Biblical topography.

Manocho.

One knows the important group of eleven cities of Judah added in the Septuagint version to Joshua xix. 9. All the critics are agreed in considering this passage, which does not exist in the Hebrew text, not as an interpolation, but as the translation of an original verse omitted by a copyist. Several of these cities are easily identified: *e.g.*, Tekoa, Bethlehem, Faghoûr, Karem, Bettîr. Others are less easy to identify on account of the variations of the different manuscripts. With these I have nothing to do for the moment. I shall only remark that all the MSS. name, after Bettîr, with very slight differences, a city called Manocho—Μανοχω, Μαναχ. Critics have connected this place with Manahat, whither were transported the men of Benjamin, originally from Geba (1 Chron. viii. 6); but it seems to result from Judges xx. 43 that this Manahat is identical with Menonha, situated in the territory of Benjamin. However that may be, 1 Chron. ii. 2 and 4 appear to indicate very clearly that this was a Manahat or Menouhat in Judah. It is to this Manahat or Menouhat that the Manocho of the Septuagint corresponds. Both are, in my opinion, the actual village of Malha. The change from *n* to *l* is a *constant fact* in Arabic, especially in vulgar Arabic, in proper names; so that when the fellahîn say *Malha*, it is exactly as if they pronounced *Manha*. This little phonetic alteration would have been facilitated by the natural attraction tending to bring the Hebrew word to the Arab word *Malha, salted*.

Topographically, Malha perfectly agrees, for it is on the road to, and a little distance from, Bettîr, which stands immediately beside Manocho in the Septuagint list. In any case it is in the country of Judah, to which this Greek passage applies generally.*

Amwas. Legends and etymology

Another interview with the fellah Ibrahim Almud gave me new traditions on the ancient Nicopolis which are not without their value. It is always the famous pestilence of which I have already spoken in my

* Schwarz (*Holy Land*, 79) supposes that the Manocho of the Septuagint corresponds with a Hebrew form, Manuka. The Greek *ch* might possibly, according to the custom of the Septuagint, be the representation of a *caph*, but it holds quite as often the place of a *khet*. Besides this supposed form Manuka once obtained, Schwarz is obliged to have recourse to another conjecture. He admits an interversion in the word, and connects it with the Mekonah of Nehemiah xi. 28, one of the cities repeopled after the captivity by the men of Judah, and finally with Mechamin, or Machamin, mentioned in the Onomasticon between Jerusalem and

previous reports which fills the principal part in these vague souvenirs of the past.

On the first appearance of the pestilence at Emmaus, the inhabitants, who were all Jews, mostly fled. Nearly all who remained died. The scourge passed, the fugitives came back to the town. But the following year the epidemic appeared again, and the people all perished without having the time to escape by flight. At this moment arrived Neby Ozeir (Esdras), who found all dead—men, women, and children. The prophet having asked of God why he had so rudely chastised the country, supplicated the Almighty to resuscitate the victims. It was done, and since that time the Jews have been named *oulad el mîté* (*the children of the putting to death*).

It is to this epidemic that the city of Amwas owes its name, according to our fellahîn. They say, in fact, of the pestilence, *amm-ou-asa* (*it was extended generally, and was an affliction*). (I have not been able to determine precisely the meaning of the second verb, which I omitted in my notes.) Of course I put no faith in the truth of this etymology, which is evidently artificial, like many of the same kind met with in the Bible as well as in the mouths of the people, and on which I have many times in these reports found occasion to insist.

It will be curious to give, side by side with this rustic etymology, a philologic explanation of the same kind given us by St. Jerome precisely *apropos* of Emmaus. The learned Fulton translates the word Emmaus as *populus abjectus, alias abjicientes*, which proves that he decomposed Emmaus into *Am*, *people*, and *Maus*, *refuse*. St. Jerome appears to allude to various Biblical passages where this word is applied by Christian exegesis to the Jewish people, and to have had notably present in his mind the verse of Lamentations iii., "Thou hast made us as the offscouring and refuse in the midst of the people."

It is clear from this etymology, more ingenious than probable, but to which we ought to have paid a little attention, that in the time of St. Jerome the Semitic name of Nicopolis was pronounced 'Emmaus, 'Ammaus, with the *ain*, and that consequently the Arabic form is much nearer the original than the Talmudic *Amaous* with the *aleph*.

This interpretation of Saint Jerome is, besides, an additional proof that, for him, the Emmaus of the Gospels was Nicopolis, and consequently the Amwas of our time; it also shows that the word Emmaus was nothing at all to do with Hamath, which is written with a *khet*,

Beit Jibrin, eight miles from the latter city. This series of suppositions is very improbable, especially if we reflect with Mr. Grove (*Bible Dict.* s. v.) that the Mekonah of Nehemiah, joined with Ziklag, was probably much farther to the south of Palestine. Schwarz adds at the end of his paragraph, *oder Malcha*, only, in his article on Malcha and Machaya, p. 89, he does not breathe a word of this identification, which presented itself to his mind for a moment, but without any plausible reasons.

and which some authors want to identify with it. Here are names of different places situated at Amwas. Khall't el Adhra, the well of *Khall't el Hammam; Ersoun; Khall't et taga,* where they show the place where knelt the camel of Saleh, the prophet sent to the Themondites. The fountain of Ain Nini dries up in summer. Formerly there was an aqueduct carrying water to Amwas from Bîr et Tiné, on the road near Bîr Eyub.

scriptions th em- ens.

I have just seen at a mason's in Jerusalem a fragment of a strange inscription, brought to light, it appears, in repairs made at the Mehkeme. The block on which it is engraved has the mediæval dressing, which gives us as our limit the period of the Crusades. There is only one line of characters rudely traced and difficult to make out:

U U S N - - 11

but what is interesting is that the line is surrounded by representations of tools and instruments: the first resembles a great cullender, the second a stove, the third is certainly a cleaver; then comes a kind of pestle; next a cutlass in scabbard. The whole resembles the apparatus of a cook. Perhaps we have the epitaph of some great *chef*. We know that the representation on the tombstones of certain artisans of the instruments of their trade was a common thing in the middle ages as well as in antiquity. Perhaps we may see in the first letters of the fragment *uus*, the end of the word *coquus*. You shall have a drawing of this enigmatic stone.

ram ades and lery of Kubbet Sakhra.

I have at length succeeded, after many researches in the various libraries in Jerusalem to which I have access, in getting at the original text of John of Wirzburg, and in studying the principal passage of this author quoted in my last report on the little arcade round the Sukhra. Here is the passage:—

"Supra se etiam, juxta tectum, locum deambulatorium circum quaque exhibentibus et habentibus canales plumbeos qui aquam pluviatilem evomunt."

The construction of the phrase is sufficiently obscure, and the manner in which Tobler and M. de Vogüé render it seems to me a paraphrase rather than a translation. If we keep to the text, taking the architecture itself as our commentary, it seems that *supra se* should mean, in the incorrect language of the author, "above the exterior wall" of which we have just been speaking, as well as of the interior wall, and not "above the roof," since immediately afterwards we have *juxta tectum*, "near the roof." It is the only explanation possible, if we admit the punctuation adopted by the editor of the text and followed by these two learned archæologists. But I think that this punctuation, which makes of the words *supra se* a phrase by themselves, is an error; and, in fact, by cutting up the text in this fashion, the words *exhibentibus et habentibus* belong to nothing at all. Replace the colon by a comma, and restore the passage as follows:—"cum pulcherrimis laqueariis supra se etiam, juxta tectum," &c., and translate: "Between the two walls there is an intermediary roof, with a beautiful panelled

ceiling, over which (which has above it), running all round, is a gallery, and which has leaden pipes for getting rid of rain water." From this rigorous translation, it is clear that the gallery was above the ceiling, and therefore had a large relative width, not being limited to the breadth of the wall. Possibly the inclination of the roof stopped suddenly before reaching the external wall, surmounted by arcades, and let the water fall upon the floor of the gallery: here they would be caught by the leaden gutters and thrown out by gargoyles placed most likely at the same points as we now see them. Tobler translates *canales* by *rohren*, De Vogüé by *tuyaux*. It is better, I think, to use the French word *cheneaux* derived from it, and signifying, not a tubular conduit, but an open canal.

Excavati within t Haram.

The excavation undertaken by the Memour against the interior of the east wall of the Haram, of which I have already spoken, has been sunk to more than 30 feet. The point chosen is nearly 160 metres (173 yards) south of the Golden Gate. We have now reached, and even passed below, the level of the soil outside. The excavation has led to no archæological or practical result; nor any traces of the dressed stones searched for. It has passed through made-up earth mixed with pottery, cubes of mosaic, fragments of marble, &c. We descended the shaft, which is not very cleverly made, and narrowly framed in. We were able to examine the wall as far as the shaft goes, and can state that the stones have no mediæval dressing. . . . I am afraid that the shaft will be shortly closed.

At the bottom of the shaft the wall presents two successive sets back, the first 3 in. of projection and 15 in. of height; the lower 7½ in. of projection, with a height as yet undetermined, the shaft having stopped at . . . . At a point 6 ft. 6 in. above the first projection the wall shows a very sensible change in construction, seeming to indicate two successive visible epochs, visible also from the outside: the more ancient below, the more modern above, naturally.

Flints inl in the blocks.

Now a few remarks on my visits to the Haram. The blocks of the inner side of the exterior wall of the Kubbet es Sukhra, visible in the frame of the wooden stair leading to the roof, are pierced by numerous openings, in which have been inlaid small pieces of flint, having their visible faces cut and polished. I cannot explain the purpose of this singular arrangement, which has perhaps a superstitious origin. The dressing of the blocks is not mediæval.

Crusadin construc tions in t Haram.

The application of the rule of mediæval dressing has led us to establish several important facts in the *enceinte* of the Mesjid. (1) Great bases of engaged columns on the platform and near the Mosque of the Mogrebbin, certainly mediæval. (2) Various fragments of architecture of the same origin built up here and there. (3) Mediæval stones and gate in the wall north of the gallery, which joins the Aksa to the Mosque of the Mogrebbin. (4) *The whole south-west angle of the esplanade of the Sakhra is entirely mediæval.* (5) Several buttresses on the west side of the platform are made up of materials of the middle ages.

I observed on the pillars of the porch north of the Haram a large number of Latin masons' marks (pricked with the point of the tool); they are engraved on great blocks, *which have been stripped of their mediæval dressing*. I suppose them to be older blocks simply used again by the Crusaders, who put signs on them to facilitate placing them in proper positions.

Niche of ancient statue.

On examining the large hollow stone which the Mussulmans consider the cradle of Jesus, I believe I have discovered that it is the niche for a statue of small dimensions.

South face and S.E. angle of Antonia.

The south face of the scarped rock north of the Haram requires to be studied attentively; at a certain point it makes an abrupt return at right angles and due north. I have not seen this angle marked in the map of the Ordnance Survey. Perhaps it is the east limit of Antonia. A little more to the west an ancient cistern is cut in the side of the rock; here and there, and at a uniform height, are to be seen in the rock quadrangular holes seemingly intended to receive beams.

Wall west and north.

The thin wall of rustic-work to the west and the north, indicated in the *Statement* of April, 1872, is again accessible and visible. We hope to make an exact sketch of it, the published plan giving a very insufficient idea of it, and not indicating the kinds of pilasters, recalling those of the *enceinte* of the Mosque of Hebron and the *débris* of the Russian ground behind the Holy Sepulchre.

We have just undertaken two excavations.

The rock-cut chambers between the Ecce Homo and the Austrian hospice.

The first, in the chambers cut in the rock between the Austrian hospice and the church of the Ecce Homo. I at first tried to push myself into the opening I, at the end of the chamber P, hoping to arrive at another chamber, or at a primitive entrance. I had to force my way in the midst of a mass of rolling stones, which shook at every movement. After two days of stubborn as well as dangerous work, we were obliged to give it up. We have, however, meanwhile, succeeded in seeing and touching to right and left two *vertical walls of rock*, at right angles, the angle being about one metre from the opening. These two walls may belong to a chamber like that lettered P; but they may also be the walls of a vestibule, whose sides were cut in the rock, and which was open to the sky. In favour of this hypothesis, the ground of the passage *i*, Plate II., above the surface of the chamber P, is on a level with that of the region X, still to explore, an arrangement which applies better to the entrance of a tomb than to a simple communication between two chambers. Besides, the enormous mass of stones, against which we have vainly endeavoured to struggle, implies the existence of a hollow much higher than a single chamber. Either this chamber has lately given way, or else it was always open to the sky.

Shaft and gallery in the Armenian ground south of the Austrian hospice.

The second excavation is in the Armenian ground (27 O. S.). Captain Warren has already made an excavation on this side in the Street of the Valley (March, 1869). The point that I have chosen is sixty metres more to the east, at the lowest point of the ground. One

shaft is already five metres deep. I propose to open a shaft to the S.S.E., in order to cut the probable line of the second wall.

X.

JERUSALEM, *May* 3, 1874.

The Inscription Bîr el Helou.

SEVEN days ago, as I was preparing to make an excursion to Jericho, an Arab of Jerusalem, who owns and cultivates a large piece of ground at Latrun, came to tell me of the discovery, or rather the apparition, of a large inscription close to that village. After the information which he gave me, I thought it best to adjourn the projected excursion and to repair without delay to the spot, in order to examine the text, which might be important, consisting, as he professed, of twelve lines, written all round, and inside a well, called the Bîr el Helou. We arrived at the well, which is situated a few minutes south-east of Latrun, at the bottom of a broad valley, whose waters it drains; it is a veritable "well of living water," and not a cistern, circular, and of careful construction, covered with a vault, in which are seen two openings showing the ancient place of a *beyyara* or *noria*. The water drawn by this machine was poured out into a small *birket*, and from thence directed by an aqueduct, half destroyed, upon the ground for irrigation. The diameter of the well is 3·70 metres. I immediately proceeded with an *empressement*, easy to understand, to search for the famous inscription: and in fact I saw running all round the interior wall of the well a considerable number of very small characters, of which I counted in certain places as many as twelve or thirteen lines. The first line, the lowest, was a very little above the level of the water, which was low in the well. The characters, traced at some distance from the margin of the well, were so small and so close together, that I could only distinguish them by means of a glass. I say *distinguish*, because it was perfectly impossible for me to read a single one, or to determine the language and the character of this mysterious inscription, to the great disappointment of the Arab who accompanied me. I estimated the number of letters at ten thousand!

After the fruitless attempt I went back to the village of Latrun, where I had to pass the night, and took advantage of the opportunity to revisit Amwas. In both these villages I found the fellahîn in a state of great excitement on the subject of the inscription round the well. They all gathered round me, eagerly inquiring if I had been able to make out the characters. I had humbly to acknowledge my inability. In turn I interrogated them as to how the inscription was first remarked, and got the following information. Twelve days before the women of Latrun went to the Bîr el Helou to draw water, and came back in a great fright, crying out that the well was miraculously filled with writing. Nothing had been noticed the day before, though the well is much frequented and supplies the whole village. The fellahîn imme-

diately imagined that the inscription was a manifestation of the will of Sidna el Khalîl (Abraham). The rumour ran about the neighbouring villages, and every day hundreds of them came on pilgrimage from the places round to contemplate the characters traced by the very hand of the patriarch.

This explanation of the enigmatic inscription which appeared in a single night was the more natural because there exists in the country an analogous legend. Forty years ago a great discussion arose on the boundaries of Deyr Eyûb and Latrun (the latter is *wakf* of Hebron and included in the lands of the Mîrî). No one knew which side to take, when the patriarch himself intervened, and placed in the night a mound on the point where he meant the boundary to pass. Next morning the newly-arrived hillock was seen, and everybody submitted, without further question, to the decision given by this supreme judge. They show the Rujm el Khalîl on the left hand of the road leading from Deyr Eyûb to Latrun. This new intervention of Abraham in the affair of the inscription was the more marked because the Bîr el Helou is also called the Bîr el Khalîl, the Well of Abraham, and because Abraham rested here, according to the local tradition, between his departure from Orfa and his arrival at Hebron. The fellahîn are so convinced of the miracle that they are coming every instant to see if the writing does not increase, and if, by chance, the patriarch has added a postscript to his long missive.

As for the explanation of the fact, they offer a very singular one. Abraham manifested his will by writing to show that he would no longer tolerate Christians in the country. All were agreed in deriving this conclusion from the miracle. At Abu Gosh, which I passed both going and returning, the people were of the same opinion, and there was only one voice in the environs. Nevertheless, they did not fail to question me very carefully whether I had been able to translate the inscription, and when I was obliged to say no, they gravely shook their heads, and appeared to draw from my inability a new argument in favour of its supernatural origin.

I passed a bad night at Latrun, partly on account of a hard bed, and partly by reason of this strange affair, which perplexed me greatly. The next day I rose before daybreak to go back to Jerusalem, but I wanted first of all to see once more this phenomenon of inscriptions, and to get it off my mind. I put in requisition the furniture of my host, and went to the well with a little ladder, a table, and a rope. A great number of the people of Latrun accompanied me, some of them assisting me with a good grace. I placed the ladder horizontally in the water, holding it in its place by the rope, and placed the table on it like a plank; then I lowered myself down to this position of unstable equilibrium, half raft half scaffold. I was now able to touch the characters with my finger, and consequently to study them at leisure. They appeared to me traced with the *galam*, with ink of a reddish black on an old coating (of plaster), which covered the wall of

the well. Where the coating had fallen off, the lines continued. The two last lines appeared to have been smeared by a rise in the water at the moment when the ink was not yet dry. The letters remained some time undecipherable by me; they appeared to consist of signs entirely arbitrary, vaguely recalling the writing of certain talismans; the execution made me think of Arabic inscriptions written at the present day on the wall with ink and the *galam*.

Looking more attentively, I discovered a fact which shows peremptorily that the text has been written only a few days. The water, which two or three weeks ago was at a higher level, having dropped, several bits of straw floating on the surface had stuck to the wall. Now I observed that the strokes of the *galam* passed *over* several of these bits; striking one away, I observed the interruption of the stroke.

I had seen enough. I climbed out and told the fellahîn in plain terms, thinking it best to make a breach in their fanaticism, that the inscription had been made a few days before by some ill-advised joker. But they would not give up. If the inscription appeared to be recently executed it was one proof more that it came from the hand of Abraham; the characters must be *Yahoudi*, *'Ebrany*, or *Syriani;* that was the reason why I did not understand them. At this moment there appeared at the bottom of the valley a caravan of camels charged with grain coming from Gaza, escorted by two Jews, whom I called in to convince these obstinate peasants. The Jews declared that the inscription was not Jewish. Trouble lost!

Decidedly the *métier* of archæologist becomes more arduous in Palestine. After the pseudo-Moabite pottery, we have a quasi-patriarchal phantom; after the fraud comes the miracle. If fanaticism joins in, one will have to give up. The inscription of Bîr el Helou is, then, of recent date. But how to explain the object with which it was drawn? It must have taken very considerable time and pains to write these thousands of signs, even though they are arbitrary, close to the edge of the water, in lines perfectly horizontal. Evidently the work was done during the night, since the evening before nothing was seen, and the next morning the women ran to announce the miracle.

Two explanations suggest themselves; I propose them under reserve. Some Mussulman searcher after treasure may have inscribed these magic signs, hoping to make the object of his search spring from the well. Or perhaps the intention of the writer is revealed by the effect it has produced—*the awakening of fanaticism tending to the expulsion of the Christians*. The thing that makes this last hypothesis probable is that in fact for two or three years past many Ottoman and European Christians have made great acquisitions of territory about this place with the view to agricultural operations. This intrusion is jealously regarded by the fellahîn, with whom the new proprietors have generally a bone to pick. Some mischievous villager may possibly have had recourse to this ruse to provoke against these Christians a religious reaction, shaking the sole cord which remains among the people of

fanaticism. Without meaning that one may see here the elements of a Mussulman Jacquerie, I must own that the emotion produced in the country by this miraculous incident has been very lively.

A few remarks made on the road :—

(1.) At Colonia, south of the road, in front of the ruined building, in a field, two great *voussoirs* with the mediæval dressing.

(2.) The hill close to Abu Gosh and south of it is called *Baten El Kheymé*. At a few minutes north-west of the village is a well whose water is endowed with healing properties. It is called *Bîr Au Kouch*.

(3.) Latrun was surrounded by a triple wall, according to the fellahîn. I have examined the ruins, which appear to me important and worthy of being noted.

(4.) At Emmaus I visited several houses and saw pieces of sculpture coming probably from the church. The exact site of the Bîr *et Ta'oun*, or well of Pest, is unknown. The Wely, placed on a height east of the village, is called Sheikh Moal iben Jebel.

(5.) The Fenich were three brothers, all kings ; their tombs are north of, and not far from, Suba ; you get to them by a well. There is, the peasants tell me, a subterranean communication between Suba and Latrun.

Excursion to Jericho.

The day after my return from Latrun we left for Jericho, where I went to ascertain certain points before heats set in. M. Pierre Decosse, overseer of the works at the Church of Saint Anne, was good enough to look after the excavation in the caverns of the Via Dolorosa and in the Armenian ground. We went to Jericho by the shortest and best known road ; our journey there offered nothing worthy of note. We installed ourselves on a little hill at the entrance to Riha, near the cemetery, and not far from Burj.

Gilgal.

Next day we went to the presumed site of Gilgal, which we had not been able to visit on our first journey to Jericho, the existence and the name of which I had spoken of to Lieut. Conder. This place, situated not far from Tell el-Ithlé (or Hithlé), has been pointed out to several travellers (Schokke and Frère Liewin) under the name of Jiljulieh. The people of Riha told us that this was a name peculiar to the Franks.* However that may be, we tried a few little excavations in the mounds of El Ithlé and Jiljulieh ; these were not deep, and led to no great results. In the first, a large quantity of pottery fragments, cubes of mosaic, and lots of glass ; in the second, sand. It is certain that there was once an edifice here of considerable importance, to judge by the mosaics. But that proves nothing for or against the identification of Gilgal, which appears to me still a doubtful point.

Fragment of sculpture at the Tawahîn es Soukker.

Next day we examined the Tawahîn es Soukker again, and especially an aqueduct where I had remarked at our first visit materials of

* An example which proves with what care one must put questions to the fellahin and draw conclusions from their answers. Some time ago the Archimandrite of the Russian Mission having asked, on my indication, to see Jiljulieh, was taken to Tell el Mufjir, which they showed him by that name.

ancient origin. We turned over all the blocks scattered about the environs, and pulled down certain bits of the broken aqueduct, which brought to light a few sculptured fragments, evidently belonging to monuments of importance. They were drawn by Lecomte.

Tell el M'gheyfer.

In the afternoon we went to Tell el M'gheyfer, also called sometimes Tell el Koursi (Tell of the Throne or the Chair), and considered by some authors as the real Gilgal. The Russians are at present digging there for building materials, they have already a considerable quantity of stones laid down with blocks brought from elsewhere in a place near Burj. Many of these blocks are covered with fragments of fresco painting in Greek style. I greatly desired to have a sketch of Kurn Surtabeh from this point, and while Lecomte was taking it our two workmen dug into the site, but without success.

Neby Mûsa.

The next day broke up camp in order to return to Jerusalem by way of Neby Mûsa. This sanctuary, so deeply venerated by Mussulmans, is in a state of complete dilapidation. We could not get into the central chambers, which were locked. We could only examine the exterior dependencies, and look through the window at the cenotaph of Moses, covered over by a silken sheet with embroidered inscriptions. Everything appears to be of Arab construction.* The only things that deserve mention are: in the balustrade of the minaret a stone with oblique mediæval dressing; in the interior of one of the windows of the central building a fragment of a granite column; in the southern face of the peristyle a base sculpture in red limestone polished, consisting of a series of flutings, in which stands out in very high relief a kind of rosette of foliage elegantly entwined.

All was nearly deserted; a few Bedawin were halting there like ourselves to breakfast; there is fresh water, of a slightly bituminous taste, in a well of no great depth.

Some minutes farther on stands a little wely, called the Kubbet er ra'i, where reposes, according to local tradition, the Shepherd of Moses, called Sheikh Hassan.

Traditions of Moses.

The memory of Moses is certainly alive among the inhabitants of this region. At every moment I heard the Arabs swearing, "By the life of the son of Amran." I questioned some of them to find out if possible the *point de départ* of the legend which places the tomb of Moses on this side of the Jordan, and consequently in such flagrant contradiction with the Biblical tradition. They told us, in reply, that when the angels announced to Moses that his last moment was come, he was

* See Mejir ed Dîn for several details on the history of this Mussulman sanctuary. He commences by mentioning the doubts on the authenticity of the tomb, adding that general opinion places it here. He assigns the construction of the Kubbet to Melek ez Zaher Bibars, who built it after his return from pilgrimage to Mecca and his visit to Jerusalem in 668 (A.H.). These additions were afterwards made. The minaret was built in 880. He mentions the annual pilgrimage hither, and speaks of apparitions and prodigies at the tomb, proving that it was that of him "who spoke with God."—*Kelim Allah.*

on the east of the Jordan, and that he fled, to escape the fatal moment, to the place now called the Neby Mûsa. There it was that he found the angels occupied in hollowing a tomb into which he descended, deceived by the subterfuge that we know. Arrived at this desert place, he said to God, "There is nothing here to drink, nor any wood to make a fire." And God said to him: "Thy water shall come from the well, and thy fire from the stones." And that is the origin of the wells dug near the sanctuary, and of the combustible stones of schist which abound at this place.

The rod of Moses.

There is met with here and near Jerusalem an insect like a centipede, called the rod of Moses. This inoffensive creature resembles a long blackish worm, and is provided with a large number of feet, by means of which it advances, preserving its straightness of form; in fact, you would think it a little stick endowed with the power of motion. If you touch it, it rolls together into a ball. This mode of locomotion and this aspect have made the little animal popular among the Arabs, who have connected it by its name with the miracle performed at the burning bush.

I got at Jericho new details on the life of Imam Aly, who is only, as I have said before, a travesty of Joshua. The boundary of the Ghor Seisaban and the Ghor of Beisan was traced by the sword of the Imam Aly, who cut through with a single stroke of his sword an enemy, the bridge or aqueduct on which he stood, and the ground beneath him. It was impossible for me to find out exactly where is the place indicated in this legend; it is called Jisr. Aly, again, had a great war to wage against the Emir Abu 'Obeîde, before the time of Mohammed. Abu Obeîde is a historic personage, who came with Omar. His tomb exists still east of the Jordan.

Bedouin pronunciation.

The Arab who gave me this information so curiously jumbled up, pronounced the name 'Obweîde; the intercalation of the *w* with the *b* and the î is familiar to the Bedouins; thus they say *bweino* instead of *beino*. Our two workmen, two worthy peasants from Beit Iksa, a little village situated west of Jerusalem, who worked some time at the repairing of the *locanda* at Jericho, gave me the history of Aly and the sun with a singular variation, which I will transcribe faithfully, but I cannot state whether it is their own invention, or if obtained by them from the inhabitants of Jericho.

Aly and the Sun.

Imam Aly received guests at a time when there was a great famine over all the country. Having nothing for them to eat, he went to a Jew and begged of him a single imaum of wheat, offering him in exchange a measure of gold. The Jew refused, saying that he would only give him the wheat on condition of getting it back again before sunset of the same day; failing which, Aly was to give him his son. The sun was about to set, and Aly searched vainly for wheat to restore the borrowed measure, when God said to the sun, "Return, O thou blessed!" He thus gave him the time necessary to get the wheat for the Jew, and he was not obliged to give him his child.

Ancient name of Beit Iksa.

The men of Beit Iksa told me that their village bears also the name of Umm-el-ela: another of those double names that I have so often pointed out. The present inhabitants belong to the Beni Zeid, and come from the north; they obtained permission of Umm-el-ela, and gave it the new name of Beit Iksa. The ethnical name to which Iksa belongs is Keswani, in the plural Kesawne—*Beit Iksan* or *Ikswan*. We must, therefore, in Palestine topography, keep account of the *migration* of names transported with the population from one place to another.

Sculptured fragment at Bethany.

The route between Neby Mûsa and Jerusalem offers nothing remarkable in archæology. The only thing we have to notice is a fine fragment of sculpture fitted into the wall of a house in Bethany; at the angle of the fragment is the head of an ox; one of the facings shows the mediæval dressing. This will be drawn.

The ass of Lazarus.

Some minutes before arriving at El 'Azariyeh (Bethany), on the east of the village is a rocky plateau, covered with sepulchral and other excavations, walls, wine-presses, &c.; one would say that there has once been an inhabited place, It was impossible for me to find out if the place had a name, and whether it was simply called a Khirbet: only at the southern extremity of the plateau local tradition shows a piece of rock half buried in the earth, and called the ass of Lazarus, saying that the animal was petrified after having been ridden by Jesus. Are we to place on this side the problematic Bethphage?

Kurn Sartabeh.

My principal and only aim in going to Jericho, was to study on the spot a point whose full importance I realised on my first visit, I mean Kurn Sartabeh, and a Biblical tradition which seems to me narrowly connected with that well-known mountain.

If, in the vast plain of Jericho, you raise your eyes northwards you will see the horizon partly closed in the distance by a long chain of blue hills, above which rises a conical peak known as Kurn Sartabeh. This peak, which is seen from a long way off, and which appears to command all the low ground at its feet, attracts the eye by its bold front, and retains it by its strongly marked form. Robinson is right when he says that this commanding summit appears from Jericho like a bastion of the western chain.

The first part of the name (written by Robinson *Kurn*, and by me *Q'rein*, diminutive of *Kurn*, a *horn*) is frequently applied by the Arabs to remarkable peaks. It is this sense which has made Lynch commit the singular error of assigning to the name the meaning, "horn of the rhinoceros." The meaning of Sartabeh is completely unknown, and we must probably look for some ancient name to correspond with it.

It is, first of all, essential to establish its orthography. I have carefully noted the pronunciation of the Arabs of Jericho and its neighbourhood, and have ascertained that the first letter is a soft S (sin), and not the hard S (sad), as the transliteration of Robinson shows.

The Sartabeh of the Talmud.

Under this form it is easy to recognise the name of the mountains mentioned in the Talmud, and written סרשבה and סרשבא. Here is the passage, quoted often since the time of Reland, which I think I ought to give in full for the better understanding of what follows:—

"Signals of fire, serving to announce the New Moon, were made from the Mount of Olives to Sartabeh, from Sartabeh to Gerufna, from Gerufna to Khoran, from Khoran to Beth Baltin."

M. Neubauer (Géographie du Talmud, p. 42) says: "They announced the New Moon to the country districts by means of fires lighted on the mountains. Later on, the Samaritans, in a spirit of hatred, lighted other fires, which caused errors. Therefore the fires were suppressed and couriers substituted."

I have no occasion here to occupy myself with the historic side of the question, and to examine if it was really possible to make a direct signal from the Mount of Olives visible at Kurn Sartabeh. I confine myself to the simple identification of one hill with the Talmudic Sartabeh. Observe, further, that the Hebraic orthography of the word is different to that of Robinson; that is, the word no more contains a *tsade* than it does a *sad*.

This fact will permit us to pass immediately to a Biblical relation advanced for Sartabeh. It is quite natural to suppose that the Bible did not pass over in silence the name of a mountain so important.

Zarthan.

Starting with this idea, some writers think themselves authorised to recognise in Sartabeh the new Zarthan (Zaretan of Joshua iii. 16), and placed by the Bible in the Jordanic region. Nothing is less admissible than this identification, which rests wholly on an etymology entirely recent. The external resemblances which seem to exist between the two words completely vanish when we compare them letter by letter. The *nun* final might correspond with the *b*, but both the *s* and the *t* are radically different in the two words.

Must we then abandon altogether the hope of finding this peak mentioned in the Bible? I think not, and I believe, on the contrary, I can adduce a passage of the highest interest, though under a form mythological rather than geographical.

Apparition to Joshua.

In Joshua v. 13—15, is related a strange episode which seems to attach itself to the consecration of Gilgal as a sacred place. Here is the literal translation—"And Joshua was at Jericho, and he lifted up his eyes and looked, and behold there stood a man before him with his sword drawn in his hand; and Joshua went towards him and said unto him, 'Art thou for us or for our adversaries?' and he said, 'Nay, but as captain of the host (SARSABA) of the Lord, and now I am coming towards thee.' And Joshua fell on his face to the earth and did worship, and saith unto him, 'What saith my Lord unto his servant?' And the captain of the Lord's host said unto Joshua, 'Loose thy shoe from off thy foot, for the place whereon thou standest is holy.' And Joshua did so."

The Hebrew word Sarsaba signifies *chief of the army*, and is rendered

in the Septuagint by ἀρχιστράτηγος. The different versions of the Bible render it *captain of the army of Jehovah*. We know that Jehovah himself is sometimes called *Jehovah Sabaoth*, when mentioned as the head of the army of angels or stars, and that this expression appears in the Gnostic formulary, *Sabaoth*.

I only wish for the moment to call attention to the striking resemblance which exists between Sar Saba and Sar Taba, when the Hebrew *tsade* is replaced in the Talmudic and Arabic form by a *tet* and a *ta*. This substitution of the *t* for an *s* is one of the most frequent remarked in the passage of the Hebrew to the Aramaic; thus Tyre is now Sor (צר).

This etymological coincidence being so complete cannot be fortuitous. It leads us to ask whether it does not conceal a close relation between the mountain and the apparition.

Let us remember how often mountains are found in relation with visions analogous to that of Joshua. Mountains, it is well known, occupy a considerable place in Semitic religions, and even the Hebrews attached sanctity to them. We understand how they served as a natural theatre for the manifestations of the Deity. I could cite many examples. Let us take only one or two.

First, the appearance of Jehovah to Moses in the burning bush on Mount Horeb. Moses, perceiving the supernatural flame, advanced towards it, as Joshua towards the man. Just as Sarsaba told Joshua, who came towards him, to take off his shoes because the place was holy, in exactly the same terms Moses is ordered to do the same thing.

For the suddenness of the vision we may compare Zech. i. 8; ii. 5. It is the same prophet who says (viii. 3), "The mountain of Jehovah Sabaoth is a sacred mountain," and also shows us (xiv. 3, 4) the Lord going forth to fight with "his feet upon the Mount of Olives."

One of the apparitions which has the most literal resemblance with that of the Sarsaba to Joshua is the appearance of the destroying angel to David. This episode is told more simply in the Book of Samuel (2 Sam. xxiv. 15), but with greater detail in 1 Chron. xxi. 14—17. The latter strongly recalls the passage in the Book of Joshua, and especially if we compare the Hebrew text.

Jehovah having sent his angel to smite Jerusalem, had pity on the unhappy town, and said to the *Destroying Angel* (*Melek ha-Machhît*), "It is enough; stay now thy hand." David *lifted up his eyes and saw the angel* stand between the heaven and the earth, *having a drawn sword in his hand. He threw himself upon the ground.* The angel, who was at this moment above the threshing-floor of Ornan the Jebusite, caused Gad to tell David to *go up* and *set up an altar on the threshing floor.*

It results from this passage that the angel was above Mount Moriah. It may not be useless to remark that the angel called *Machhâh* seems onomastically connected with the Mount of Olives, often designated by

the much-disputed name of *Har ha-Machhît.** We know that the two mountains of Moriah and Olivet were intimately connected from a religious point of view, and in ceremonies, and that on the latter (2 Sam. xv. 34) was a place where David adored Elohim.

These analogies alone would be enough to make us seek in this episode of Joshua's life the existence of a mountain. And is this mountain anything except that which now is called by the significant name of Sartabeh, or Sar-Saba?

The story of Joshua analysed, means two things: (1) the height of the point where the apparition stood, for he lifted up his eyes; (2) a considerable distance between the vision and Joshua, for Joshua went *towards* him; and the angel said, *I come towards thee.* Further, the use of the word עמד, *stars*, means that the supernatural being was upright on a base.

The dominant position and the characteristic aspect of Sartabeh, the master of the plain, makes it an admirable place for the appearance of the Captain of the Lord's host.

Strategic importance. Sartabeh.

It is not superfluous to remark that, besides its probable character of sanctity, the peak had great strategic importance. Schulz has already proposed to place on it the Alexandrion of Alexander Jannæus, and the considerable ruins which Zschokke found on the summit have induced him also to share this opinion. The fact of its military strength would help to explain Joshua's question, "Art thou for us, or for the enemy?"

The appearance of the warrior-angel of Jehovah hovering over this strong natural fortress with which he identified himself, perhaps, is quite topical. Who knows even that the naked sword in his hand, as that of the destroying angel (of the Mount of Olives and Moriah), is not in some way connected with the flame which, according to the Talmud, was lit on the determined moment on the summits of the sacred mountain?

What are we to understand exactly by Sar Saba? The question is extremely difficult, and belongs to the more obscure side of the Hebrew religion. I cannot touch on it here. Let us only remark that God himself is called (Dan. viii. 11) Sar Ha Saba, which agrees perfectly with Jehovah Sabaoth. There is no doubt as to the general meaning: it is *commander-in-chief*. Thus Omri was Sar Saba over all Israel. It is the exact representative of the present Mussulman Serasker,† common to Turks, Persians, and Arabs.

* Most commentators derive Machhît, the name of the Mount of Olives, from Machah, and translate it *oil*, while they make Machhît distinctive from Chahat. I do not know the true etymology for each of these words, but what is without any doubt is they singularly resemble each other, and that this resemblance, added to the coincidence of the events, cannot be accidental.

† As for the etymology of Serasker it is, I believe, wrong to make a hybrid composition of the Persian *ser*, *head* and the Arabic *'asker*, *soldier*. Serasker is historically an Arabic term; it is thus, linguistically, a Semitic word; *ser* corre-

We see in Daniel that many nations have their *sar* or guardian angel; for example, Greece and Persia. The *sar* of Israel is Michael, who in other places in Daniel is qualified as the chief of the power, Sar hamalkot, and the chief of the grand chief, Sar hag-gadol; "Sar Michael is your chief."

Michael generally personifies the divine power, particularly in his manifestation of violence, or when he combats with Satan to help man. One remembers (Jude) Michael and the devil disputing over the body of Moses.

The later traditions do not hesitate to recognise Michael in the angel which appeared to Joshua.

Church of St. Michael on the site the Vision.

Phocas speaks of a *Bounos* (tell) which was situated in front of the Mount of Temptation, on which stood a temple indicating the place where Joshua saw the Archangel Michael.

An anonymous description (Allat. 13) says, that below the monastery of St. Euthymus there was a monastery of the Virgin, whence Joshua saw the angel. Daniel also speaks of a church at Gilgal, where they had added a convent dedicated to St. Michael, because it was on the spot where Joshua had his vision.

It results from the testimony that tradition admitted the vision of Joshua to have taken place during his sojourn at Gilgal. I have already remarked that this conclusion appeared to be indicated by the tenor of the episode and by the position that it occupies in the chapter, although it begins with the words "at Jericho." We need not take the expression too strictly, and may very well understand by it the environs of Jericho.

The disposition of the mountains which border the plain of Jericho is such that the Sartabeh is invisible west of Riha, since it is completely masqued by the chain of the first plain, and especially by the height of Ichché Ghorab, which terminates it at the east. But starting from Riha to the east it appears at all points of the plane. The drawing that M. Lecomte has made is better from Tell M'gheyfer, one of the sites proposed for Gilgal. We have also a sketch of Tell el-Ithlé, taken from Jiljulieh.

I must note an observation of some interest. Coming from the east, as one approaches Jericho, Sartabeh retreats little by little to the eye, between Ichché Ghorab, which ends by covering it up completely. The profiles of these two mountains and the chain on which they stand offer the strongest analogies, taking account of perspective and proportion.

It has been entirely impossible for me to collect the smallest legend on this peak; nor any indication except that of the iron ring and the great cavern of which Zschokke was told. I thought at first that I

sponds with *sar*, Hebrew, *chief*, and 'asker is connected with the Hebrew root *achkar*, to hire troops; the ain, additional, in the last word is purely prosthetic; we have already in Hebrew *achkar* with a prosthetic aleph, and the transformation of the aleph into the ain is frequent; thus Achkelon becomes 'Askalon.

could find some connection between the venerated *magam* of the Imam Aly-Joshua and the sacred *magam*, where Joshua stood while he spoke to the angel; but the Mussulman sanctuary is too far to the west to permit Sartabeh to be seen.

THE SURVEY OF PALESTINE.

LIEUT. CLAUDE R. CONDER'S REPORTS.

XXI.

28th April, 1874.

SINCE last I wrote from W. Far'ah the Survey, though still impeded slightly by wet weather, has been steadily advanced, and we are able by two days' work in subsidiary camps to fill in the whole piece required to complete the Jenin sheet, bringing the total to about 2,800 square miles, and giving the whole of the Jordan valley from the Dead Sea to within a mile or so of the Sea of Galilee. Our intermediate camp between Wady Far'ah and Beisan was placed at W. Maleh, and was by far the most desolate site which we have as yet been forced to select. A few fellahîn and Arabs were settled not far off, and supplied us with guides and meat. The water in the neighbourhood is all more or less salt, whence the name given to the principal stream. We were therefore glad to remove to the plentiful springs and open rolling country of the neighbourhood of Beisan.

The following are the chief points of interest which we have noticed during the last fortnight:—

Yerzeh. Yerzeh is a ruined site of very considerable extent, lying at the foot of the fine isolated hill called Ras Kader. The ruins seem of a late Græco-Jewish type, and the whole of the site is covered with a confused *débris* of moderately-sized rough-hewn stones, beneath which foundations are visible in parts. One or two stones have a broad flat draft, and seem rather to have been intended for tablets. Towards the north of the town are pillars and a fine lintel, probably remains of a temple. The ornamentation of the lintel with rosettes and the conventional vine is of the ordinary debased classic style. There are a considerable number of rock-cut tombs, internally very rough, and with loculi of both kinds; externally the circular arch above the door is very well cut, and in one case structural. A Greek inscription, illegible all but a few letters, with a rough ornamentation, is to be found on the front of one of these sepulchres. There are one or two moderate cisterns cut in rock. An ancient road leads by the spot at the foot of the hill.

Tyasir, like most of the old sites in this part of the country, is almost undermined with caves and rock-cut tombs. On the south-west of the village there exists, however, a very interesting little monument, of which I have taken very careful measurements. Tyasir.

It seems probably to have been a tomb, and its door is placed towards the east, the interior being square, with four corner piers, which supported a groined roof, as far as can be judged by the shape of the remaining haunch stones. The projection of the piers gives a recess on each side of the chamber, three of which may have been occupied by sarcophagi. A regular stylobate runs round the outside, and on it stand attached pilasters with a projection of only two inches; there are two intermediate and two corner pilasters on each face of the building. The projecting profile of the door is very curious, and resembles that at Nebi Yahyah to a certain extent. We did not succeed in finding any capitals, but fragments of cornice, with classic details and very rich foliated work, were lying near. The size of the stones, some over four feet long, their excellent workmanship, and the beauty of the carved work of the cornice, show that the monument* must have been, when complete, a very fine one, and probably the property of a man of distinction.

The narrow gorge above the warm springs of El Maleh is commanded on the north by a fortress set in an almost impregnable position. With much trouble we reached the top, and executed a plan of the *enceinte*. It is irregular in shape, fitted like a modern redoubt to its rocky site, and surrounded, as usual in the Crusading buildings, with vaulted chambers. The masonry generally used is neither large nor well cut, but the corner stones of the fortress, both externally and within the principal gate on the north side, are all marked with a rough draft. Burj el Maleh.

Kaukab el Hawa, situated on the cliffs south of the Sea of Galilee, and visible from Beisan, seems to be also a Crusading fortress. Its *enceinte* wall, of great thickness (eleven feet), is built of blocks of black basalt, which are nearly all drafted. It is a point of considerable interest to determine whether such blocks were *cut* by the Crusaders themselves, or only used where found in older buildings. It has been argued that the Crusaders would employ lighter material, in order to allow of greater rapidity of construction; but strength seems in their days to have been the most important requisite, and in no fortress which I have as yet seen in Palestine is small masonry used in the outer walls of the place. Kaukab (Belvoir), standing on no Roman route, and with masonry which bears every sign of being intended for its present use, argues strongly in favour of the large drafted masonry having been actually quarried by the Crusaders. The Saracenic buildings, such as the great Khans, are, on the contrary, generally of smaller masonry, and in one instance (Cæsarea) a sloping revetment of small stones in very hard cement covers the larger masonry of the Crusading wall. Kaukab el Hawa.

* It was photographed and planned by Major Wilson, R.E. See Photo. No. 97, old series.

The plan of the fortress of Kaukab is irregular. There appears to have been a central building supported on vaults, and vaulted chambers ran round the town immediately within the wall. The gate on the east was closed by a portcullis, the place for which is still visible. A ditch fifty feet wide surrounds the fortress on three sides, but on the east a steep slope leads directly down to the Jordan valley.

Attention was first drawn to the great interest of these curious mounds, which were first excavated at the same time by Captain Warren, who supposes them to have been fortifications. In a subsequent number of the *Quarterly* it was pointed out that similar mounds are in process of formation at the present day both in Egypt and in India, being made by the accumulating refuse of sun-dried bricks which are picked on these heaps, those which are spoilt serving as a sort of platform on which others are baked; thus gradually a mound accumulates, and would, when deserted and overgrown, present exactly the appearance of a tell. The tells are found in the Plain of Esdraelon, and in that of Acca, near the Kishon, but more especially in the Jordan valley. I have already given a list of the true tells near Jericho which Captain Warren found to consist of sun-dried bricks. Near Beisan, and in the plain south of it, there are twenty true tells, apparently of the same character with those at Jericho, besides other mounds formed of crumbled ruins to which the name tell is also applied. In confirmation of the latter theory of their formation I would call attention to one or two points. First, they occur invariably in the immediate vicinity of water, generally at a spring or beside a running stream. Second, they are always found in alluvial plains and in places where clay may be expected to exist; thus, for instance, at Beisan they are found in the "clay lands" between Succoth (generally supposed to be S'akût) and Zerthan, which was below Jezreel, where Solomon cast the brass work for the temple service. Third, they are known, at least at Jericho, to consist of sun-dried bricks. It has been remarked that they occur at the mouths of passes which they were supposed to defend, but I may remark that this is hardly a rule, as many are placed in positions which can have no military significance, whilst the wadies at whose mouths they are placed always contain water. Neither can they be held to defend the Jordan fords, for many important fords have no tell near them. Where they do occur along Jordan it is in places where springs or tributary streams flow down to the river. Their great antiquity is shown first by their being mentioned in the Bible at an early period (Geliloth); secondly, by their having been subsequently built upon in a few cases in Roman times. None of the true tells have, however, been identified with Biblical sites, unless, indeed, we except those at 'Ain el Sultan.

The shape and appearance of the true tells would also point to the same explanation of their origin. They are evidently accumulations. Often two occur close together of different size, or two or more small tells spring on a platform formed by a large one; sometimes a small subsidiary

mound, as though only lately commenced, will be found at the foot of a very large one.

The interest and importance of such remains can hardly be over-estimated. They form a key to the understanding of all the more ancient ruins in Palestine. Nothing is more natural and probable than that the Jews who in Egypt, as we know, were employed in the manufacture of bricks, and whose first possessions in the country were in the plains, should have resorted to this material for the rapid construction of towns, necessitated by the total destruction of the Canaanite cities. The method in which this destruction was made, its completeness and rapidity, seem to show that these cities themselves were of no great strength, and it is even possible that the brick-making may be carried back to Canaanite times. Of architecture as a fine art there seems good reason to suppose the Jews were ignorant, nor is there anything in the Bible or in the country to indicate that the towns of the early Biblical period were better built or more important than the present Syrian villages. In the time of Saul we find the people dwelling in caves, and there is much evidence which points to the old inhabitants of Palestine having been much addicted to such a practice. Even at the present day the natural caves and larger tombs are used as dwelling-places and stables.

In modern Damascus we have an instance of a city mainly built of sun-dried brick, and the chopped straw in its clay calls to mind the bondage of the Egyptian brickfields. Wood is used in combination with this hardened mud, and may have been in the early Jewish towns at a time when it was more plentiful than now. At the same time, it must be recognised that stone-quarrying was very extensively undertaken at some period of Jewish history, as is evidenced at the present day in every part of Palestine, though the period it is almost impossible to decide. In the hill country the use of stone must naturally have been greater than that of brick. So now in Palestine the hill villages are of stone, and those in the plains mere collections of mud huts.

The interest of the inquiry is very great in explaining how it occurs that the more ancient ruins of the country are mere mounds in which the presence of stone is scarcely discernible, and the grey colour of the mass alone distinguishes the site. Were brick supposed to have been extensively used, this peculiarity of the ruins of Palestine would be easily accounted for.

Beisan.

The survey of the extensive ruins of Beisan occupied some time, and the twelve-inch map of the whole was executed by the corporals, whilst Sergeant Black accompanied me to the short camps at Kawkab and Sulem, where, with an average temperature of about 92 degrees in the shade, we completed the work to the northern line of the Jenin sheet. The principal Roman ruins are the Theatre, Hippodrome, and some large tombs. The tell fortifications are possibly crusading, and a ruined mosque, two fine viaducts, and a good-sized khan, no doubt Saracenic. The theatre, situate in the basin which isolates the tell, and through

which two streams flow, joining at the lower bridge, is built of black basalt, and in better preservation than most of the ruins of the country. It is a semicircle and a third, being closed on the north by a massive wall, the foundations alone remaining, including a block of marble six feet nine inches by four feet, which forms the chord to an arc of 120 degrees. Nine vomitories remain more or less perfect. They are double, and out of the western passage of each a narrow gallery leads diagonally to a cage open towards the interior of the theatre. Each cage is a hollow quarter sphere eight feet in diameter, and was no doubt closed by bars in front. There seems to have been twelve rows of benches eighteen inches high, but they are scarcely traceable beneath the rank growth of spring herbs.

The stream from a mill flows close to the theatre, and may have been turned into a basin of some kind for the naval entertainments.

The Hippodrome is almost entirely destroyed, and its plan recovered with difficulty. It appears to have been constructed by two circles seventy-six feet radius, with centres 128 feet apart. Its longest axis is nearly east and west; the entrance probably on the east. Stone seats eighteen inches high surround it on all sides. The base of what was probably one of the goals lies towards the western end of its greatest diameter line.

Capitals, fragments of ornament, and other indications, prove the great extent of the town, which stretched south of the modern village, and both north and south of the main stream of W. Jalúd. The tombs, cut in a soft sedimentary river deposit, in cliffs close to the stream, resemble in arrangement those at Sh. Abreik, with this peculiarity, that they contain sarcophagi larger than the loculi placed in a row parallel with the length of the chamber. We planned them carefully, but found no inscriptions. Not far from them, on the north-west, is a fine cistern or birket lined with hard cement, and once roofed over. A row of pillars exists close to it, and a large building seems to have stood on the spot. The extent of the Roman town we were able to make out, fully tracing its walls, nine feet thick, of black basalt, including an area of one-third of a square mile.

leon's tory. There is perhaps no corner of Palestine where the events of Bible history crowd so thick upon one another as in that portion which we have just completed. On the north, the Sea of Galilee, with its sacred memories; on the west, Tabor and the hill Moreh, the Valley of Jesreel, and the chain of Gilboa; on the south, Succoth; and on the east the winding Jordan. But perhaps the history most fully illustrated by our present survey is that of Gideon's victory over Midian, and subsequent pursuit (Judges vii.). The nomadic hordes of the Midianites had, like the modern Beni Suggar and Ghazawíyeh Arabs, come up the broad and fertile Valley of Jezreel, and their encampment lay, as the black Arab tents do now in spring, at the foot of the hill Moreh (Nebi Dahy), opposite to the high limestone knoll on which Jezreel (Zer'ain) stands. As on the first night of our camping at Sulem (Shunem), when

six horsemen and fifteen foot of the Bedouin came down on the village and retreated, after stealing a horse and a cow, followed by the fellahîn with shouts and a dropping fire, so in Gideon's time the settled Jewish inhabitants assembled to drive back the marauders. The well Harod, where occurred the trial which separated 300 men of endurance from the worthless rabble, was no doubt the 'Ain Jalúd, a fine spring at the foot of Gilboa, issuing blue and clear from a cavern, and forming a pool with rushy banks and a pebbly bottom more than 100 yards in length. The water is sweet, and there is ample space for the gathering of a great number of men. It has, however, like most of the neighbouring springs, a slightly sulphurous taste, and a soft deep mud covers the middle of the basin below the surface.

The graphic description of the midnight attack, when, no doubt concealed by the folds of the rolling ground, the 300 crept down to the Midianite camp "in the valley beneath," and burst on the sleeping host with a sudden flicker of the concealed lamps, can be most readily realised on the spot. The immediate flight of the nomadic horde is most easily traced on the map. "The host fled to Beth-shittah in Zererath, and to the border of Abel-meholah" (vii. 22), a course directly down the main road to Jordan and to Beisan. Beth-shittah may perhaps be identified with the modern village of Shatta, and Abelmea (as it was called in Jerome's time) with Wady Maleh. Zererath would appear to be a district name, and is generally connected with the Zerthan and Zeretan of other passages of the Old Testament. It is known to have been "below Jezreel," and near Beisan. I think, therefore, we can scarce doubt that the name still exists in the Arabic, 'Ain Zahrah and Tullúl Zahrah, three miles west of Beisan. Thus the immediate pursuit drove the enemy some ten or fifteen miles towards the Jordan banks. A systematic advance immediately followed. Messengers went south two days' journey to Mount Ephraim, and the Jews descended to the lower fords of Jordan at Bethbarah, which has been supposed identical with the Bethabara of the New Testament, and which was in all probability situate at the traditional site—the pilgrims' bathing-place near Kasr el Yehúd, east of Jericho. Meantime Gideon, having cleared the Bethshan valley of the Midianites, crossed by the fords near Succoth at its southern extremity (the modern Makhathet Abu Sús), and continued the pursuit along the east bank of the Jordan. The Midianites were thus entirely cut off. They appear (or at least some part of the host) to have followed the right bank southwards towards Midian, intending, no doubt, to cross near Jericho. But they were here met by the men of Ephraim, and their leaders, Oreb and Zeeb, executed on that side of Jordan, their heads being subsequently carried to Gideon, "on the other side." This confirms positively the theory which I offered somewhat cautiously in a former report, and makes the identification of the "Raven's Peak" and the "Wolf's Den" with the 'Ash el Ghor'ab and Tuweil el Dhiáb a natural and probable one. The sharp peak overlooking the broad plain north of Jericho would indeed form a natural

place for a public execution, which would be visible to the whole multitude beneath.

Additional interest attaches to the identification of Zererath or Zerthan, for it points to the locality where the Jordan was miraculously blocked during the passage of the Israelites. The Ghor or Lower Jordan valley is not continuous here; in parts the cliffs are closely approached, and a blockage of the river at one of these narrow places would leave its bed dry for a very considerable time, as a lake would gradually form in the wider basins above, and a rise of more than fifty feet, with a width of nearly a mile, could be obtained in place of a river some twenty yards in breadth. Such a blockage might any day be occasioned by one of those shocks of earthquake which from the earliest historical period down to the present day have been constantly felt in the Jordan valley, and which point to the volcanic nature of the agency which has caused this extraordinary depression.

Our work in this part of Palestine, including what we hope will prove the refinding of Gilgal, the settlement of the boundary of Judah, the identification of the rock Oreb, and yet more certainly that of the doubtful Ænon, with the explanation of the flight of Midian and the discovery of Zererath, cannot fail to be considered of the highest interest, and proves how much light the survey of Palestine must throw on the simple, exact, and graphic descriptions which abound in the Bible, and which are only apparently confused or contradictory because we in times so remote have almost lost the key to their explanation.

Antipatris. Having finished the Jenin sheet, and carried up the Jordan to within a mile or two of the Sea of Galilee, we proceeded by easy marches to the Maritime Plain, and arrived at Kefr Saba on the 23rd, the fourth day from Sulem. Here about 120 square miles remain to be put in, which will complete the Jaffa sheet of the map; and to this work, after having settled the triangulation, which is here a matter of no small difficulty, I propose to leave the non-commissioned officers under Mr. Drake's care, starting myself for Jerusalem, in preparation for my home visit. When finished the party will move to Jerusalem, where they will await my return, employed in the execution of the plans.

The question of most interest in this part of the work is that of the site of Antipatris, and it seems to me that a very slight investigation of the ground is sufficient to decide the matter. The town built by Herod bearing this name in honour of his father was on the site of the ancient Kaphar Saba, the name of which still lingers at the village where our camp is now pitched. The points in favour of its identity, further than the preservation of the name, are, however, few. Antipatris was 150 stadia, or about sixteen miles, from Jaffa. Kefr Saba is rather more than fourteen. Again it was, according to the Onomasticon, twenty-six miles from Cæsarea, lying between it and Lydda. Kefr Saba is about twenty-five Roman miles from Cæsarea. On the other hand, it is said by Jerome to have been six miles south of Galgula, but Kefr Saba is about three miles north-west of Jiljulieh, which is possibly the

place in question, and nearly due west of Kalkilia, which might perhaps be identified with Galgula.

Antipatris was protected on the south by a ditch and wooden rampart, with towers constructed by Alexander Balas as a defence against the advance of Antiochus from the south. The Roman road from Jerusalem to Cæsarea led through Antipatris, which was surrounded by a river and by fertile wooded country, and situate close to a hilly ridge. All these latter requisites are quite inconsistent with the Kefr Saba site. No Roman road leads to it from the hills; no river is found, the water being from a couple of wells; no trees or ruins of a large town exist. The indication of direction is also a very important point (although slighted by Dr. Robinson), as it is far less likely to have become corrupted in copying than the numbers which indicate distances would be. It would seem, therefore, that the name has wandered from some other site in the neighbourhood, and become affixed to this modern village.

It remains, therefore, to find in the vicinity a site which shall fulfil the requisites enumerated and form a natural position for one of those noble towns which sprung up in Palestine during the prosperous times of Herod the Great. Such a site has been already suggested at Ras el 'Ain, where the ruined shell of the fine old Castle of Mirabel stands above the "wonderfully beautiful" springs of the Aujeh river. The fine Roman road which we have traced step by step from Jerusalem to Jifneh, and thence to Tibneh, descends the steep hills and runs down straight to Ras el Ain. It was by this road, as is now generally allowed, that St. Paul was hurried by night to Antipatris, whence he proceeded to Cæsarea. From Ras el 'Ain another Roman road, marked in one place by a milestone, leads along the foot of the hills to Jiljulieh and Kalkilia, and thence to Kaisarieh. It is the main road from Ramleh through Lydda, and Ras el 'Ain thus lies exactly between Lydda and Cæsarea, which cannot be said of Kefr Saba; still further, it is south of the site of Galgula, being three and a half miles from Jiljulieh and about six from Kalkilia. To Jaffa is eleven miles, to Cæsarea thirty Roman miles. These numbers, though less exact than in the former case, are yet approximately correct in comparison with the words of Josephus and Jerome. But what is more important to observe is that Ras el 'Ain is the natural site for a town in the neighbourhood. The streams which burst out round the mound are the surrounding river of Josephus. The hilly ridge rises just behind. The trees, indeed, are no more, having shared the fate of the great oak forest, the stumps of whose trees cover the sandhills from Mukhálid to Jaffa, but there can have been no spot so likely to be fertile in the Plain of Sharon as the sources of the Aujeh. It would be interesting to find the ditch which was dug by Alexander Balas, and which was no doubt filled with water from the Aujeh, and intended as a more direct line of defence than that of the winding wady bed. Mr. Drake informs me that a ditch full of water some fifteen feet wide exists near the bridge, but this is some five or six miles from Ras el 'Ain and directed south-east. The trench reached the

"Sea of Joppa," according to Josephus, and has no doubt been filled in by the light soil of the plain and left no more trace than its wooden wall and towers. At Kefr Saba no signs of a trench are visible, nor is there any supply of water to fill it. Thus balancing the evidence as a whole, we arrive at the pretty safe conclusion that the Antipatris of Herod was, like his Jericho, built at the source of one of the finest springs in the country. A visit to the site, with its mound occupied on the west by the Kala'at, and presenting in other parts an appearance similar to that of the ruins of Roman Cæsarea—heaps of broken stone and occasional large blocks overgrown with the yellow composite flowers which invariably mark such spots—serves to strengthen this impression.

Geology. The whole district passed through since leaving Jerusalem is geologically of the highest interest. I have already noticed the discovery of old sea levels and the very striking indications as to the date and mode of formation of the Jordan valley, on which I propose to offer the Committee a separate paper when my notes have been completed and digested. The great valley of Far'ah (not to be confounded with Wady Far'ah, near Jerusalem) is no ordinary water-worn depression, but has been formed by some considerable convulsion, no doubt at the same date as the depression of the Ghor, upon which it will throw considerable light. It marks a change in the character of the country. The dip of the beds north of it is much less violent, and an upper plain called El Bukeia forms an intermediate step between the Ghor and the hills of the watershed. Crossing this plateau we arrive again in another district where there is much local disturbance. Trap rocks here first appear on the east, and a very considerable outbreak is found in the upper part of Wady Maleh. The springs in the neighbourhood are more or less salt, as the name signifies. The stream in the valley has a temperature of about 85 degrees, and the so-called Hammam is a spring of 100 degrees Fahrenheit. A red marl similar to the formations of the Nebi Mûsa basin here appears in the lower hills near the Ghor; it overlies beds of red and white banded marls, and is in most places capped with a sort of conglomerate which seems to be of fresh-water origin, pointing to the probability that the present Plain of Succoth and Beisan was at one time a lake, one in the great chain of lakes which seem most probably to have extended from the Dead Sea to the Huleh.

On arriving at Beisan we again change the scenery and obtain a country purely volcanic. The hills of Gilboa have a general dip upwards towards the north-west, and from beneath them the hard black basalt comes out as noticed first at Zer'ain. The whole breadth of the Wady Jalûd has a basis of black basalt which has tilted up the limestones of Nebi Dahy (Little Hermon), and has formed various cones and small craters in its neighbourhood. Kaukab el Hawa seems to have been a centre of eruption, and a shelf on which Beisan stands is due to this disturbance. The basalt here overlies the white marls—a valuable indication of geological date. The hills north of Wady Bireh, bordering the Sea of Galilee, are principally basalt, the limestone where

it does crop out having a dip upwards towards the north-east. It is a remarkable instance of the ignorance of Palestine geology that this great field of basalt, extending over perhaps 200 square miles, is not shown on Lartet's map, though the smaller outlying fragments of it in some cases are.

MR. TYRWHITT DRAKE'S REPORTS.

XVIII.

CAMP IN WADY EL FAR'AH, *March* 21, 1874.

On the 24th ult. we left Jerusalem and descended to 'Ain el Sultan. *En route* we visited El Marassas and Shunet Marassas, a Christian ruin of considerable extent, containing the ruins of a church, of which two apses and a portion of mosaic pavement in red, yellow, black, and white are still visible. There are also a number of unusually large rock-hewn cisterns with well mouths; on one of these crosses ✠ are cut on each of its eight sides. Tradition tells of a gentle recluse, named Kaddís K'raytún (the priest Chariton), who lived in days of yore. Suffering much annoyance from the thievish propensities and knavish tricks of his neighbours, he determined to extirpate them, and accordingly served round a draught of serpent's venom, which miraculously destroyed them all, notwithstanding its being a blood and not a stomach poison. After this the good monk lived long and happily.

Between Khirbet Dikki and Marassas we observed a ruined dolmen. The two top slabs were of considerable size: below this is a small semicircular platform built against the hillside with unhewn stones, and lower down again is a small natural cave.

On the following day we rode down to the Dead Sea to fix a couple of piles for measuring the rise and fall of the water. These piles were made by Herr Shick at Jerusalem, and are marked every six inches. It is to be hoped that all travellers will note the height at which the water stands on each at the time of their visit. They are placed opposite the Rijm el Bahr, or island at the north end of the sea. We drove in the first at the water's edge without difficulty, but the second, which had to be driven in water five and a half feet deep, was no such easy job. The joint exertions of Conder and myself, however, enabled us at last to cope with the excessive buoyancy of the water, which forced us to swim, and the strong current setting eastwards, which several times carried us away from our work. The use of a heavy mallet while swimming was a novel experiment and somewhat trying; it would have been impossible anywhere else than in water as buoyant as that of the Dead Sea.

A ride to the Jordan mouth, a *détour* back westwards to Wady Dabr, where we had a fruitless search after the basaltic greenstone mentioned by Dr. Tristram, and a light meal of eggs and rice in the tent of Shaykh Jemíl abu Nusayr, completed our day's work.

The Dead Sea.

A curious fact with regard to the Dead Sea is to be noticed as showing that the bottom is still subsiding. At the southern end, the fords between the Lisan and the western shore are now impassable owing to the depth of the water, though I have been told by men who used them that they were in no places more than three feet deep some fifteen or twenty years ago. Again, the causeway which connects the Rijm el Bahr with the mainland has, according to the Arabs, been submerged for twelve or fifteen years, though before that time it was frequently dry. The Arabs say that the level of the water varies much in different years, and is not dependent on the rainfall, but on the sea itself, as they express it. The currents of this sea are curious and difficult to explain: that along the northern shore sets constantly eastwards, as is shown by the large pebbles at the north-west corner, and their gradual diminution in size towards the east, till at the Jordan mouth there is little but mud and sand. At 'Ain Feshkhah I formerly noticed a current running southwards.

On the northern shores there are no less than six distinct steps in the sea-bank; the two lower are thickly strewn with driftwood and canes. These banks are composed of fine water-worn shingle, and may be traced to a considerable distance up the Ghor, notably at Maydan el 'Abd, some three miles north of 'Ain el Sultan, where an enclosure is formed at the base of the hills about one mile long and half a mile broad. Into this area, which at first glance seemed of artificial construction, two or three small wadies drain, but, having no outlet, filter through the soil. The various geological sections seen in the side of the Ghor are very interesting, and explain the formation of the valley, which will, I think, be fully settled when the Geological Map undertaken by Lieut. Conder is completed.

The Jordan valley is now in full beauty. Wady Kelt is a swift, brawling stream, twenty yards wide and from one to three feet deep. The plain is covered with herbage knee deep, and decked with many bright flowers; deep-red anemones, lavender-coloured stocks, yellow mustard and marigolds, white clover and many coloured vetches, are the most conspicuous.

I have been surprised, however, at the comparative absence of bulbs, for besides a beautiful violet dwarf iris with white eye, I have only found two or three other species.

At this season there are enormous flights of wood pigeons (*Ar. jozel*), and also of starlings and jackdaws. In the summer the *Kata* or sand-grouse take their place. These latter birds drink every morning and evening, and consequently are always found nearer water during the extreme heat than in the winter, when pools are of frequent occurrence in the desert.

The first place we camped at north of 'Ain el Sultan was Wady Fusaïl, near the site of Khirbet Fusaïl, or ruins of Phasaelus, a town founded by Herod. At the present day traces of aqueducts and the foundations of ruined garden walls built of unhewn stone are all that remain of the

ancient city. This place is superstitiously avoided by the Arabs, who believe that it is haunted by a *ghuleh*, or evil spirit, and consequently never camp there. The Abu Nusayr men who accompanied us thus far took their leave as speedily as possible, and the relatives of the Emir el Dr'ayi of the Mesa'ayd Arabs soon left us, under plea of sickness, with only a slave as representative of their tribe. This desertion was due to no ill-will, for here they are most friendly and serviceable, but simply from dread of the *ghuleh*, as I with some difficulty discovered, for at first they attributed it to fear of raids from the south; but as I knew the Arabs in those parts to be friendly, I asked one of the Emir's sons point-blank whether they were afraid of a *jinn* or *ghul*, and with much hesitation and many blushes he avowed that such was the case. This fear of *ghuls* is not uncommon in the country, and I have seen several places said to be haunted by them which are carefully avoided after dusk by the neighbouring peasantry.

We obtained our guides from the fellahîn of the neighbouring hill villages, who were pasturing their cattle in the luxuriant herbage of the Ghor.

Kurn Sartabeh.

Between this camp at Wady Fusaïl and our present one is a very remarkable conical hill called Kurn Sartabeh, or Horn of Sartabeh, who, according to the Arabs, was an ancient king who built the castle there. He is by some called Sabartalah. This horn or peak is a very prominent point, and visible from Hermon and from Moab, as well as from many places on both the eastern and the western hills. It rises some 1,500 feet above sea level, and consequently is 2,500 feet higher than the Jordan at this part of its course. An old path zigzags up a ridge from the south, and by this we rode up. To the west of the peak a ruined aqueduct, built of large roughly-hewn blocks, crosses a narrow watershed and leads to a series of cemented cave cisterns; this aqueduct, though of some length, was simply for the purpose of collecting rain-water. At the base of the cone is an artificial hollow on the west, while the other sides are so steep as to be practically inaccessible to assailants. A very steep ascent of 270 feet from this western ditch brought us to the top, where are solid masses of masonry with drafted stones having irregular rustic bosses, and varying in length from two to three and a half feet by two feet in height. This central construction was probably a beacon, and there are traces of a surrounding wall which has been violently overthrown, probably by an earthquake, in part at least, and the *débris* encumbers the eastern slope to a considerable depth. The stones employed in the construction are hard marbly limestone, seemingly dolomite, and very heavy. The labour of bringing them up to such a position must have been very great, as the nearest point from which they could have been hewn is nearly a mile distant. El Mintar, a fine beacon station near Mar Saba, is fully in view of this point, and is the probable line of signal communication with Jerusalem, which is hidden by the intervening hills from the north-west.

Akrabeh.

A few days ago I rode over to visit this town, which must formerly

have been the capital of the Toparchy of Ahrabattene, so frequently mentioned by Josephus and in the Books of Maccabees, though it is always the district and not the town referred to by these writers. The modern village is of considerable size, and contains houses better than those usually found in this country. The inhabitants boast that formerly they used to muster some 2,000 guns; now, through the constant drain on their resources by the government, they cannot collect one-tenth of that number. In the north-east part of the village is a mosque of some pretensions, built on part of the ruins of a Christian church. The side port of the mosque door is formed of the broken lintel bearing this portion of an inscription (ΤΟΥΤ)Ο ΕΠΟΙΗϹ(α)Ν ΤΠΕΡϹΙΜΒΙΟΥ ΚΑΙ ΤΕΝΩΝ in *square* characters. In the chamber beneath the dome is another fragment . . . ΤΣ . . . ΕΝΤΩΑΤΙΩ. The ornamentation on both these stones is of similar character to that observed on the Christian ruins of the third to the fifth centuries in North Syria.

A fine tank of masonry stands conspicuously against the hillside in the centre of the village. The stones are roughly squared and packed with small chips; the wall on the lower side is nearly eight feet thick. The Husn or stronghold is a block of houses on the hill to the north-west. Some of the lower courses consist of blocks 3 × 2½ft. with rustic bosses, and appear to be Roman or Herodian. Within the enclosure, which can only be traced in part, is a fine rock-hewn cistern with well-mouth. This, though reputed to be only filled by rain-water, is said never to fail, and the water is much esteemed.

Several Roman roads have been traced in this part of the country, and will doubtless help us to fix the sites of several places, of which the names are now entirely lost, though mentioned in old itineraries.

Hajar el Asbah.

When adverting to M. Ganneau's theory that the Hajar el Asbah, near the north-west part of the Dead Sea, is the stone of Reuben mentioned as forming a boundary mark between Judah and Benjamin, I advanced certain geographical reasons which seemed to me conclusive proof that the boundary line could not by any means have passed by the stone known by that name—marked in Van de Velde as Hajar Lesbah. If additional proofs were needed they would, I think, be found in the fact that the name is not uncommon amongst the Arabs. From this camp we have found both a Hajar el Asbah and an 'Arák el Asbah. The Mesa'ayd Arabs give the same meaning to the word as the Abu Nusayr, Ta'amirah, and other Arabs do in the south, namely, *streaked with white*. The Hajar el Asbah near here is a fallen block of yellow limestone with a white streak at one corner; it lies beside the road in a narrow gorge of Wady el Far'ah. The 'Arák or cliff is distant some seven or eight miles to the north, and is called so for a similar reason.

ON THE IDENTIFICATION OF ÆNON.

BY LIEUT. CONDER.

THE true position of the springs of Ænon, where John the Baptist is recorded to have assembled crowds for baptism, has hitherto been a matter open to dispute; but it is probable that the light thrown on the subject by the present Survey will be sufficient to set the question at rest.

Three sites have been proposed for Ænon, and the great distance between them shows how meagre the literary indications of its position are. The first of these is the traditional site of St. Jerome, some eight miles south of Scythopolis or Beisan, and not far from Succoth. The existence of a Tell Salim has been pointed to in favour of this view, but the name, as most carefully collected by us from several individuals, is Tell Sárem and not Salim; thus the only confirmation of the tradition proves founded on a mistake.

The second site which has found favour with many authors, including Mr. Hepworth Dixon and Dr. Barclay (City of the Great King), is at the springs in Wady Far'ah, one of the heads of the great Wady Kelt (the traditional brook Cherith), where there is generally a good supply of water. The same name Salim has been sought in the neighbourhood, and supposed either to refer to Jerusalem, or to a Wady Salim, the proper name of which, however, turns out to be Suleim.

Dr. Robinson, however, was the first to point out the most probable site, and has been followed by Dean Stanley, although the full confirmation of this view has not, I believe, been as yet put forward.

John the Baptist is said to have been baptizing "*in* Ænon, near to Salim, because there was much water there." There is nothing to point to the place having been on the banks of, or even near to Jordan, where this particular expression would have little or no meaning; it would rather seem to refer to a part of Palestine which was otherwise not well supplied with water. The expression, "He that was with thee beyond Jordan," would also seem to indicate that the place of baptism in question was not east of the river. Ænon might very well be thought to be a district name from the preposition used in the Greek.

Now, due east of Nablus is found the village of Salim, a Salem mentioned more than once in the Old Testament, and even thought by some to be the city of Melchisedec, and north of this, as Dr. Robinson pointed out, are copious springs in a broad open valley. Curiously enough this also, like the Jerusalem site, bears the name of Far'ah, though spelt rather differently in the Arabic. The most satisfactory confirmation of the theory is found in the preservation of the name Ænon in the modern village of 'Aynún, which is marked on Vandervelde's map at a distance north of the springs (three or four miles) about equal to that of Salim on the south. Thus the requisites of two names and an

abundant supply of water are satisfied, although the existence of 'Aynún appears hitherto to have escaped notice.

The character of the ground is a point of great importance in considering the relative probability of the sites near Jerusalem and near Nablus. The former, Wady Far'ah is a precipitous ravine in the midst of a stony country, and apart from any main line of communication. It would be practically impossible to collect a large crowd in such a spot.

The Nablus site, on the other hand, seems naturally to suggest itself for such a purpose: an open valley, a plentiful supply of water, and a situation on one of the main lines through the country from Jerusalem to Nazareth. It has been suggested that our Lord's journey through Samaria was with the object of visiting the Baptist, and were such the case, he "needs must" pass by Shechem in order to arrive at the springs of Wady Far'ah.

This important valley, which forms a great geological feature in the country, rises near Salim, and separates Mount Ebal from the chain of Nebi Belán. It becomes a deep and narrow ravine, with steep hill sides burrowed with caverns, and runs north under the name of Wady Beidán until it forms a junction with another branch near the small ruin called Burj Far'ah. Here the first springs are found, and a stream, which even late in the summer is copious, runs between bushes of oleander eastward towards the Jordan. The whole course of the valley presents here a succession of springs, and the flat slopes on either side allow the approach of an unlimited crowd to the banks of the stream. After passing through two narrow rocky gorges, the valley enlarges into a broad plain, on the south side of which rises the block of the Kurn Súrtabeh. From this point the course of the bed is remarkable, and has never been correctly shown on any map. For nearly seven miles the Wady Far'ah runs parallel with the Jordan, and its final junction is below the latitude of 'Ain Fasäil.

The position of Ænon, or rather of the springs frequented by the Baptist, may therefore be with some degree of certainty referred to the upper source of the Wady Far'ah stream lying, as has been shown, between Salim and 'Aynún. It is one of the most picturesque spots in the country, and the mind easily pictures the wild figure of the Forerunner, clad in garments precisely similar to the modern Bedouin, and assembling round him the turbaned denizens of the great cities and the half-clad villagers in the wild glen, remote from the more civilised life of the hill towns and hamlets.

ANTIPATRIS.

In 1866, when making an excursion to Cæsarea and Athlit with Captain Anderson, R.E., and Dr. Sandreczky, I stayed for two days at the large fountain of Ras el Ain, and came to the conclusion that

the artificial mound above it, which is now crowned by the ruins of the Crusaders' Castle of Mirabel, marks the site of the town of Antipatris, at which St. Paul rested on his journey from Jerusalem to Cæsarea. Antipatris has generally been identified with the modern village of Kefr Saba, some distance to the north of Ras el Ain, on the Maritime Plain, but there are good grounds for doubting the correctness of this identification. I had hoped before discussing this question to have been able to consult Lieutenant Conder's survey of this portion of the plain, but as my friend Dr. Sandreczky, who independently came to the same conclusion as myself with regard to the position of Antipatris, has recently published a paper on the subject in the "Ausland," it may interest the subscribers to the Fund to know the grounds upon which our opinion has been formed, without waiting for the arrival of the map, especially as Lieutenant Conder has adopted the same identification after a careful survey of the ground.

Our information relating to Antipatris is obtained from the Bible, Josephus, the Talmud, and early itineraries. In the Bible we are told (Acts xxiii. 31, 32), that "the soldiers, as it was commanded them, took Paul, and brought him by night to Antipatris. On the morrow they left the horsemen to go with him, and returned to the castle," whilst we gather from verse 23 that they were to start at the third hour of the night.

Josephus, Antiq. XIII., xv. 1, states that Alexander Jannæus, in order to prevent the march of Antiochus from Syria southwards along the Maritime Plain, "dug a deep ditch, beginning at Chabarzaba, which is now called Antipatris, to the Sea of Joppa, on which part only his army could be brought against him. He also raised a wall and erected wooden towers, and intermediate redoubts for 150 furlongs in length, and there expected the coming of Antiochus; but he soon burnt them all, and made his army pass by that way into Arabia." The parallel passage in the Wars I. iv. 7, informs us that Alexander "cut a deep trench between Antipatris, which was near the mountains, and the shores of Joppa; he also erected a high wall before the trench, and built wooden towers, in order to hinder any sudden approaches. But still he was not able to exclude Antiochus, for he burnt the towers, and filled up the trenches, and marched on with his army." In Antiq. XVI., v. 2, we are told that Herod "erected another city in the plain, called Capharsaba, where he chose out a fit place, both for plenty of water and goodness of soil, and proper for the production of what was there planted; where a river encompassed the city itself, and a grove of the best trees for magnitude was round about it. This he named Antipatris, from his father Antipater;" and in the Wars I., xxi. 9, that Herod built a city "in the finest plain that was in his kingdom, and which had rivers and trees in abundance, and named it Antipatris."

In describing the march of Vespasian from Cæsarea, Josephus

says (Wars IV., viii. 1) that he led his army to Antipatris, and after remaining there two days marched on, laying waste the places about the toparchy of Thamnas, and proceeded to Lydda and Jamnia. The Jerusalem Itinerary gives the following distances:—Lydda to Antipatris, 10 miles; Antipatris to Betthar, 10 miles; Betthar to Cæsarea, 16 miles; and Eusebius and Jerome make Antipatris 6 miles south of Gilgal; the Antonine Itinerary makes Betthar 18 miles from Cæsarea and 22 from Lydda, or 40 from Lydda to Cæsarea in one itinerary, and in another 31 from Cæsarea and 28 from Lydda, or a total of 59 miles. Neubauer informs us, "La Géographie du Talmud," p. 86-89, that the names Kefr Saba and Antipatris are both found in the Talmud, and he infers from the manner in which they are mentioned by the different writers that they were two separate and distinct places. In one passage the coasts of Antipatris are mentioned in connection with those of Yischoub, possibly Arsuf, and from this it has sometimes been assumed that Antipatris was a coast town, an opinion held by William of Tyre, and other writers of the middle ages, who identified it with Arsuf. It is, however, impossible to reconcile any position on the coast with the notices in the Bible and Josephus, and we can only suggest that the expression arose either from the establishment of a district of Antipatris, which reached to the sea-shore, or from the use of the river Aujeh as a means of transport by boats, which would make Antipatris in a certain manner a sea-port. In the eighth century there was a large Christian community at Antipatris, and Theophanes alludes to a massacre of them by the Arabs in 744 A.D.

From the Bible we gather that Antipatris was on the military road connecting Jerusalem with Cæsarea, and at a point whence it was convenient for the guard of horsemen to continue the journey without the foot soldiers: from Josephus, that the town was in the plain, yet near the mountains, παρώριον, that it was abundantly supplied with water, "rivers in abundance," that the soil was fertile, and that it was a point in the line of defence taken up by Alexander Jannæus across the Maritime Plain. Josephus, in one passage, tells us that the line of fortification began at "Chabarzaba, which is now called Antipatris;" and in another that Antipatris was built "in the plain called Capharsaba," at a place where there was plenty of water. These two passages are somewhat at variance, and the latter would almost lead us to infer that Antipatris and Capharsaba were distinct places, a view supported by Neubauer's reading of the Talmud.

Let us now see how the two sites Ras el Ain and Kefr Saba respectively meet the required conditions; at Ras el Ain there is a large mound, apparently artificial, covered with old foundations, broken columns, &c., and evidently the site of a place of some importance. On its summit is a large mediæval castle built, at least in part, on the foundations of a much older building; and at its foot are the largest springs, without exception, in all Palestine, far exceeding in volume

those of the Jordan at Tell el Kady. A small river rises at once from the ground, and flows off noiselessly, through marshy ground, to the sea. The springs are the only ones in the neighbourhood, and are probably the "Deaf Fountains" of the Crusaders, the castle being Mirabel, a name which still lingers at the mills of El Mir lower down the stream. Ras el Ain is sufficiently close to the mountains to be called *παρόριον*; it is on a rich portion of the plain, and conveniently situated with reference to the Roman road from Jerusalem, which strikes the plain immediately to the east of it. Kefr Saba lies on a mound partly composed of rubbish; there are fragments of columns and old foundations in the village, and also on some small mounds to the east, where traces may still be seen of the Roman road to Cæsarea. There is no running water, and no spring, the villagers deriving their supply of water from two deep wells, and rain-water which collects in winter in two hollows. The position of Kefr Saba out in the open plain cannot be said to be near the mountains, and as it is some seven or eight miles from the point at which the Roman road from Jerusalem to Cæsarea left the mountains it can scarcely be considered a suitable place for changing the guard from foot to horse soldiers. The name is certainly identical with the Capharsaba of Josephus, but as we have previously shown there are some grounds for believing that Kefr Saba and Antipatris were distinct places. We may now turn to the military aspect of the question, and ask what would be the best line of defence for an army to take up on the plain to prevent the march of a force southward. To this there can be but one answer, the line of the Nahr Aujeh. From the fountains at Ras el Ain to the sea the river is deep, unfordable for several months in the year, and has in several places marshy banks. It must thus have always presented a serious obstacle to the advance of an army, and one which no soldier acting on the defensive would neglect to make use of. Between Ras el Ain and the foot of the mountains there is but a comparatively narrow strip of level ground, forming a pass, through which any force advancing southwards must march, and one that could be easily closed by towers and a ditch. That the Crusaders were not ignorant of the military value of this feature is apparent from the ruins of the castles of Mirabel and Mejdel Yaba, guarding each flank of the pass; and if Antipatris were at Ras el Ain, Herod, in selecting the site, was no doubt influenced by military considerations. Any line of defence from Kefr Saba to the sea would be almost useless, and the features of the ground do not lend themselves to a work of this kind. The distances in the itineraries differ considerably, and until Betthar, the intermediate station between Antipatris and Cæsarea, can be identified, it is difficult to draw any inference from them. In the Jerusalem Itinerary ten miles have been lost apparently between Betthar and Cæsarea. Jerome, however, states that Gilgal was six miles north of Antipatris, and there can be scarcely a doubt that the former place is represented either by the modern Jiljuliyeh, which lies south of Kefr Saba, but some three and a half miles north of

Ras el Ain; or by Kalkilia, which is nearly due east of Kefr Saba, and about six Roman miles north of Ras el Ain. The distance from Lydda to Ras el Ain is eleven and a half Roman miles, which agrees fairly with that given by the Jerusalem Itinerary between Lydda and Antipatris, viz., ten miles.*

C. W. W.

THE SECOND STATEMENT OF THE AMERICAN PALESTINE EXPLORATION SOCIETY.

WANT of space prevented the notice of this number in our last issue. It is dated September, 1873, and copies were received at the London office in January of this year. It contains the following papers :—

(1.) The Greek Inscriptions at the Nahr el Kelb, by Professor J. A. Paine.

The Nahr el Kelb, the Lycus, or Wolf River of Strabo, descends from the side of Sunnin, a prominent peak of Lebanon, and flows into the Mediterranean five miles south of Beyrout, after a short course of twenty miles. It forms a natural road to the heart of the Lebanon and over to Cœle-Syria, and as such has been used from very early times. The river finds its way to the sea between perpendicular ridges of rock, round and over the southern of which the road is carried at an elevation of a hundred feet above the water. Another more ancient road is carried over the ridge at a higher point. On the lower road Professor Paine discovered three Greek inscriptions, one on a stone in a Roman wall and two cut in the rock. The most important one has already appeared in the *Quarterly Statement.*

The other two have not yet been read. Professor Paine appends an extremely interesting essay on the meaning and value of the inscription.

(2.) A Paper on the "Nosairees," by Mr. Augustus Johnson.

This singular people, called by the Rev. Mr. Lyde—who wrote a volume, "The Asian Mystery," on them—the "Ansairiyeh," are considered by Mr. Johnson as descendants of those sons of Canaan who were in possession of Arka, Arvad, Zimra, and Sin, on the sea-shore, and of Hamath, when Abraham came from Ur of the Chaldees. They have a tradition that their ancestors were driven by Joshua out of Palestine, and they call their castles by Jewish names, such as Joshua, Solomon, John.

Recent discoveries of MSS. show that the creed of this people is a confused *mélange* of idolatry, Judaism, Christianity, and Islamism. They recognise the prophetic character of Jesus Christ frequently; quote the

* This notice was written before I had an opportunity of seeing Lieut. Conder's report No. 22, which contains some additional details. When the map reaches England it may be possible to reconcile the discrepancies in the itineraries rendered above.

names of the apostles, and many passages from the Psalms and New Testament; they revere the name of Mary; observe the feasts of Christmas and New Year's Day according to the calendar of Julian; they celebrate Epiphany, Palm Sunday, Easter, and some of the apostles' and saints' days, and in their Communion service they use consecrated wine. From the Jews and Moslems they have borrowed ablutions and circumcision, and have adopted Moslem names, except those of Omar and Abu Bekr, whom they curse and abhor. They quote much from the Koran, but obtain many features from the Sabians and Magians, as appears from the respect they pay to light, fire, and the heavenly bodies.

In their writings Mahomet and Christ are referred to as the same person manifesting himself at different epochs.

(3.) The Hamath Inscriptions, by William Hays Ward, D.D.

This paper contains a proposed restoration of the inscriptions from squeezes taken by Lieutenant Steever and Professor Paine. As, however, plaster-casts have since been received of the stones, these restorations are now chiefly valuable as records of ingenuity and labour. Mr. Hyde Clarke points out that, in the essay accompanying the plates, his own work, published in the *Quarterly Statement* for April, 1872, has been adopted by Dr. Ward without acknowledgment.*

(4.) Husn Sulayman, by the Rev. Samuel Jessup.

This is a careful and interesting account of the ruins in North Syria which bear the name of Husn Sulayman, or Solomon's Stronghold, a name probably given by the Nosairees. It lies at two days' ride north of Tripoli. The ruins are extensive, consisting of two principal enclosures, of which the southern is the larger and more important. It is a rectangle 450 ft. by 280 ft., and from 10 to 40 ft. high. There are four great portals, each in the centre of a wall, with carved lintels and ceilings. On the stones of the wall were found inscriptions in Latin and Greek. Within the area stands an Ionic temple in ruins. A smaller temple stands in the northern enclosure. The history and date of these ruins remain yet to be discovered.

(5.) "Our First Year in the Field."

This is an instalment of Lieutenant Steever's work, bringing the reader down to the commencement of the Moab work. Lieutenant Steever arrived in Beyrout on Jan. 6, 1873, Professor Paine having reached that place a week or two before him. After many difficulties at starting, the expedition set off from Beyrout in March. The following is from Lieutenant Steever's report, which embodies Professor Paine's notes:—

* In the last anniversary address of the Philological Society is a report by the Rev. A. H. Sayce referring to Hamath. The connection of the Hamath with the Babylonian is there referred, under the date Oct. 1873, to M. Lenormant, as well as the indication that the claims of Phœnicia to precedence in the arts of civilisation must be disputed. This had previously been pointed out in these pages by Mr. Hyde Clarke, for whom we may fairly claim precedence.

"The expedition consisted of the following members:

Edgar Z. Steever, junr., A.M., Lieutenant U. S. Army, chief engineer and surveyor and commander.

Rev. John A. Paine, archæologist and naturalist.

Rev. Alanson A. Haines, first assistant engineer.

Wm. G. Ballantine, A.B., second assistant engineer.

George Subbet, native of Damascus, a student of the Protestant Syrian College of Beyrout, interpreter.

Bishara Abou Shafateer, native of Beyrout, a graduate of the Protestant Syrian College, a collector in the Department Natural History.

Melville B. Ward, first general assistant."

We extract the following from the report:—

"We had nine riding animals and twenty-seven pack ones, with the usual number (eighteen) of muleteers, some of whom brought along young mules and donkeys for their own use, to the number of eight. This large number of mules was rendered necessary by the lack of all facilities east of the Jordan. All our boxes for the collection of specimens in mineralogy, zoology, and botany, for transporting squeeze paper, books, and instruments, as well as a three months' supply of provisions, had to be prepared in Beyrout and conveyed to some safe depôt, convenient to our field of operations. Every preparation has been made with care and thoroughness. The engineering and astronomical instrument cases were covered with canvas, and carefully packed in boxes; the mercurial barometers slung over the back, and the chronometers, transported by hand, under the superintendence of Mr. Ballantine.

On the way a digression was made to inspect a number of sarcophagi on the hill-side, so very large as to be visible from the road. They proved to be forerunners of Khân Khulda. For nearly half a mile the mountain side is sprinkled with these sarcophagi, commonly of great size, rivalling even those of the sacred bulls at Sakara, in Egypt, nearly all more or less worn—as deeply water and weather worn—as deeply as the unhewn natural rock beside them. Occasionally they were unbroken, evidently untouched or unmoved from their original position. In these the great weight of their massive covers has been their perfect security. Here and there caverns occur, some of which are manifest extensions of natural caves, while others are cut out of the rock. Both have side chambers on either side for the reception of moderate-sized sarcophagi.

Almost directly east of the Khân, one-third the way up the hill-side, foundations remain of buildings whose great stones at once suggest Phœnician or Greek work, but no trace of a bevel could be detected along their edges. A portion of these constructions do not appear to be merely foundations, but resemble low walls and show a turreted top.

Inscriptions are said by Mr. Porter (*Handbook*, p. 380) to be wholly wanting; but this is not the case. I soon found one, in a niche, of three short lines, beginning ΙΟΥΛΙΑΝΗ, a mortuary record, standing at the

head of one of the smallest sarcophagi there, not over four feet in length on the inside. On the long outer edge of another sarcophagus cover I discovered another inscription, too old and washed away to be copied. A squeeze might bring out something legible. The first I find De Saulcy saw and Waddington has taken it from him (*Voyage en Syrie*, pl. 3, 1864). The second is altogether likely to be new. A thorough search, I feel assured, would reveal others of high interest. Indeed, while copying the first one, a crowd of boys came panting up from the Khân with the keeper of the establishment himself, who told me of a very deep bîr far up on the hill, near which there was writing, and the name of another place where inscriptions exist.

Porphyreon.

All that is left of the ancient town of Porphyreon is a single granite column with a sarcophagus by the hamlet of el Jiyeh near the Khân Neby Yunas. A Phœnician site has been replaced by a few old gnarled, starved tamarisks, beside a Moslem well.

Platana.

Crossing the Ras Jedrah, a few old foundations were observed near a little Khân, uncovered and dug over afresh for building stones. This may have been the site of the fortress of Platana.

Roman Milestone.

A little way south of Sidon, beside the road, lies an almost perfect Roman milestone, bearing the names of Septimius Severus, and of his son M. Aurelius Antoninus Augustus, more generally known as Caracalla, and dating from the year 198 A.D. It is a plain column of grey granite nine or ten feet in length. A short walk along the sea-side or over the cape southward reveals the fact that Ras Surafend must have been built upon throughout its extent in ancient times. Near at hand are remains of an aqueduct, which most likely conveyed the water of 'Ain Kanterah round the point. Here are foundations, and there stone presses, still entire. The whole bank facing the sea is full of pieces of glass, potsherds, and fragments of tiles.

Sarepta.

All the way across Ras Surafend—the site of ancient Zarephath, Sarepta—we saw evidences of former inhabitation, in old foundations, walls, &c., and pits, from which their materials had been removed. About el-Khudr we noticed a short granite column still standing, large pieces of marble capitals, and a fine sarcophagus in the very place it was cut from the native rock.

'Adlan.

Just after passing the ruins of 'Adlan, with its caverns hewn in the opposite cliffs, my attention was attracted by a number of stones standing upright at some distance from our route, nearer the sea-shore. Riding up to them they struck me at once as rude stone monuments of high antiquity. Before reaching them, two hundred feet or more, in the open field lay a large, heavy stone, two feet high, three feet long by two wide, having in its smoothed, flat surface an excavation eight inches deep, about as wide and one-third longer. Before the day was over I found several others of the same sort; and the only conclusion I could arrive at respecting their character and use, was that they are ancient altars. This cutting, sunk deep in the top, was intended and employed for the fire of wood or coals, while the victim was laid across,

above, from one side to the other of the excavation. There were now, of course, no traces of fire remaining on the well-weathered stone; but the bottom of this opening in every case was rough, and in some cases deeply cracked by gaping lines, with rounded edges. On the very summit of Ras-el-Kelb, north of Beyrout, two months or more ago, I came across a similar artificial depression in a point of rock between three and four feet high, which preserved every appearance of having been designed and long resorted to as a place of sacrifice. This one, however, had an outlet cut down one side of the excavation, leading down the side of the rock for a distance of two feet. These rough stone monuments occupied a position in the lines of low walls running along the ground in the form of an exact rectangle, about two hundred feet in length, lying in an east and west direction. The front, forty feet wide, was placed thirty feet before the line of the upright stones. Midway between the front wall at the surface of the ground and these pillars stood two low ones, respectively eighteen inches and three feet high, and not more than three feet apart; they seemed to guard the entrance to the sanctuary. Coming to the upright stones themselves, they were found to be ranged in a parallelogram directed north and south, with sides about forty by twenty-five feet in length. Five out of seven were standing on the east side of this parallelogram—only two on the west side; the complete number, four, were standing on the south end, and none were remaining in their upright position along the north line. Of the fallen stones, some were still lying in their places, particularly on the west side; others had been carried a little way out of place—two beyond the north-west corner, and one sixty feet away to the west. Of the upright stones only one was leaning, and that inward—the fourth one from the south corner of the front line. All these pillars were rectangular blocks, two feet wide by twelve to fourteen inches thick, standing five to seven feet out of the ground. To have kept this position so long a time, there must be from two to four feet more hidden in the earth. They bore no traces of workmanship, other than what had been necessary to cut them from their quarry. Of all, one side was rough rock, the other three were as smooth as hewing from their native places would make them, and no more. In every case the hewn, flat side was turned inward, and the rough, untouched side outward from the interior of the sanctuary. The material was the loose sandstone of the shore rock. Continuing on toward the west, the rectangular outline along the ground was kept up for about one hundred and fifty feet. Fifty feet from the western end, half way from the north and south lines, lay a large stone heap. Outside on the south was a stone mound, among whose *débris* a circular stone curb, five and a half feet in diameter, was noticed. Outside on the north was placed another block of stone nearly square, but with rounded corners, having a square excavation from three to seven inches deep—apparently another altar. Half way to the sea and a little to the north a cavern well was located, with steps leading down to its clear and

abundant water; around were scattered basins and troughs of hewn stones—some entire, others broken in the middle, or to such an extent as to be entirely unfit for use—in many forms, round, square, and rectangular. I cannot but believe that these upright stones are veritable dolmens connected with early Phœnician worship."

The expedition remained in Moab till the end of August. A base line, five miles long, from ten to fifteen miles from Hesban, was measured, and nearly five hundred square miles of the country triangulated. Long despatches have been received on the work and are promised for the next *Statement*.

The above is a brief account of the contents of the American *Statement*. Lieutenant Steever returned to New York in the autumn of last year, but we learn from the secretary that the sum of 60,000 dollars has been raised, and that a new expedition is about to start thus provided with nearly three years' funds in advance. We wish the American Society every possible success.

THE SHAPIRA COLLECTION.

It was not to be expected that the evidences unearthed by M. Ganneau and Mr. Drake as to the real character of a large part, if not all, of this collection, should have passed unchallenged. We published in the April *Quarterly Statement*, together with the confessions of the old man Abd el Baki and the apprentice Hassan ibn el Bitâr, a letter from Mr. Shapira, stating that he, with Pastor Weser, had found seven vases with inscriptions. These inscriptions have not been copied and sent to England, like the preceding. Lieut. Conder wrote also on March 19th, giving an account of an expedition which paid a visit to Moab, unaccompanied by Mr. Shapira. They found no vases with inscriptions, nor any but Roman pottery. On the other hand, the Arabs of Arák el Emir produced more than forty pieces of pottery resembling the Shapira Collection.

On April 4th Pastor Weser wrote a letter to the *Athenæum* giving his arguments why the pottery should be considered genuine. In this he states that he had made three journeys to Moab. In the first, not being guided by Selim—he does not state the name of his guide—he found twelve pieces of pottery, plaster with inscriptions, and broken pieces of figures. In the second, Selim el Kari guided him to a spot where he found seven vases with inscriptions; in the third, which was that mentioned by Lieut. Conder, he bought pieces not inscribed.

He further states that the potteries had all been searched, but nothing suspicious was found.

Selim's house was also searched, but no proof of forgery found. This, with the preceding, was after M. Ganneau's second letter to the *Athenæum*.

An article called "Chauvinism in Archæology," written by Professor

Schlottmann, was published in the *Nord Deutsche Allgemeine Zeitung* of April 12th. As this took the form of a personal attack on M. Clermont-Ganneau we do not reproduce any portion of it.

On March 30, 1874, the following letter from M. Ganneau appeared in the *Athenæum*. The Committee of the Fund publish this, in justice to their officers, and by the kind permission of the proprietors of the *Athenæum*, but they can in future publish only *new facts* in the affair.

JERUSALEM, *March* 30, 1874.

I think that I have amply shown, in my second letter on the pseudo-Moabite pottery (*Athenæum*, March 7, 1874), that we may consider the method of defence set up by the principal culprit as equivalent to a confession, and that to the bundle of proofs already published I might add the avowal, so to speak, of the accused. Selim, not calculating the force of the weapon he was wielding, has struck himself.

I only return to the subject to open the eyes of those persons who are not yet shaken in their sanguine convictions. These persons admit two things:—

1. That Selim, the principal agent, has imprudently lied in accusing me of a stupid machination.

2. That, nevertheless, he did not fabricate the pottery picked up on his own indications.

We may ask, first, how to explain Selim's lie, perfectly useless to himself. As he did not hesitate before this invention, we must hold him morally capable of a material as well as a verbal imposture.

But, it may be argued, "there is a great difference between moral possibility and material execution. We grant that Selim has given the measure of his sincerity by the absurd accusation which he raised against you. He is, further, a fellow whom we have ourselves always mistrusted. Still, it is absolutely impossible to conceive that an Arab should have invented these figures and vases covered with Moabite inscriptions."*

I have heard this objection made and repeated by many persons here, who attached great importance to it, and said that if Selim was really the author of these objects he ought to be the first professor in the world, and that the poor devil has neither the necessary talents nor the knowledge to devise and execute a whole collection of ceramic art and a *corpus* of inscriptions.

First of all, I call attention to the rudeness of the things, from the artistic point of view. One does not require to be a great sculptor to fashion these infantine figures, in which their most ardent partisans, like Mr. Dunbar Heath, can only praise the "style and type of gro-

* My own opinion is, that Selim fashioned the objects and made the inscriptions, and that he only had recourse to the potters for the preparation and baking of the vases. I have never been tempted, for my own part, to address the potters to see if I could obtain anything similar to those said to have come from Moab. If any attempt has been made in this direction, I am a stranger to it, knowing beforehand that it would be useless.

tesque uncouthness all their own." Moreover, the inscriptions with which they are covered, in "Moabite characters," are untranslatable save by some *savants* more courageous than fortunate, to whom we owe versions, entirely contradictory, of a small number of these texts.

This premised, I go on to prove that Selim *knows how to draw well enough, and that he has a sufficient knowledge of the Moabite character to be the author of the pottery.* He is a painter by trade, and daubs canvas with religious subjects for Greek pilgrims.

Here, for instance, is a fac-simile drawing, made by his own hand, under my eyes, and in my house, five years ago, when he first entered into negotiations with me about the Moabite Stone. It is a sketch drawn from memory, and representing a statue of Lot's wife, which he pretended to have seen three or four hours' distance from Dhiban, on

the shores of the Dead Sea. A woman bears a child on her shoulder in Arab fashion; in the right hand she holds a jar. On this scrap of paper that I have exhumed from my portfolios are, besides, a study of a camel, extremely simple, and the commencement of my own portrait (!).

Certainly, I do not say that Selim's *chef-d'œuvre* would have the same success as my friend Holman Hunt's "Shadow of Death," if exhibited in Bond Street; but it proves that he understands drawing well enough to model those "Moabite" statues, which would not be out of their place among the gingerbread figures at a fair.

So much for the artistic side. Pass now to the inscriptions. In my first pamphlet on the Moabite Stone (1870), I mentioned, among other things which aided me in restoring the mutilated text, a copy of several

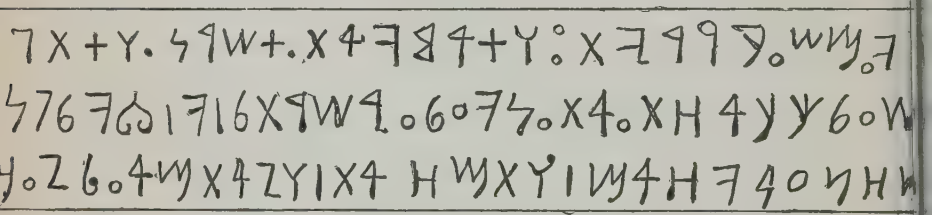
lines of the inscription executed by an Arab of the city, who had seen the original before its destruction. This Arab was Selim el Gari.

In fact, towards the end of 1869, I received from him, then in the land of Moab, through M. Bergheim, a copy containing three lines in Moabite character, with a sketch of the stone, its dimensions, and certain words in Arabic, of which the following is a translation:—"This is only one line of the lines, of which there are forty. It is among the ruins of . . . . (word effaced). It is five palms long, and three broad."

The name of Dhiban had been purposely obliterated; I do not know by whom, or why. But as my attention had been some time before called to this monument, it was not difficult for me to guess the name effaced.

Later on, Selim returned to Jerusalem, came to me, and gave me a copy of a much larger part of the inscription (lines 13-20) of which, before, he had only sent me a part.

This copy, made from left to right, and with no indications of lines, was accurate enough to be of considerable use. I verified it by aid of



my squeezes and fragments, and it served to correct many of my readings. It will be given among other materials in the definitive treatise which I propose to publish on the Moabite Stone when I have time and the means.

Meanwhile, here is the photographic reproduction of the first copy which M. Bergheim handed to me open, the identity of which he can, necessary, certify.

The characters which represent lines 13, 14, and 15, are copied with exactness sufficient to permit one to recognise the Moabite letters.

The practised and adroit hand which traced them is perfectly capable of drawing those which cover the trans-Jordanic pottery.

More than this, the document shows us remarkable similarities in the pseudo-Moabite pottery, similarities of a *personal* character, which reveal the same individuality.

For instance, all the *mims* (*m*) in the monument of Mesha are invariably drawn in the same style, five zigzag strokes, the fifth of which has a long tail. Now Selim's copies, made from the original, show us the

mim several times drawn in a variation of form essentially peculiar to Selim, and not existing *at all* in the original.

Very well, *this arbitrary form is found again* in the inscriptions of the Shapira Collection.

Unfortunately, I have not with me copies of the suspected inscriptions to multiply these instructive resemblances; but I am so convinced that others might be made, that I shall not hesitate to extract from Selim's two copies all the characters interpreted by him after his own fashion, and differing from the original. And I doubt not that we shall thus discover the origin of the characteristic variants, so extremely improbable, of the incriminated texts.

To sum up: neglecting all the proofs which I have collected in any preceding reports, setting aside the decisive conclusions drawn from the critical character of the inscriptions, we may henceforth consider it established about the man,—

1. That he has no scruples of conscience.

2. That he is artistically capable of executing such rude pottery as that of the Shapira Collection.

3. That he is familiar with the Moabite letters, having had occasion to copy a great number of them (250) from an original monument.

4. That on the pseudo-Moabite inscriptions is found one, and perhaps more than one, letter, in a curious form which does not exist on the monument of Mesha, but which does exist in Selim's own copies of this monument.

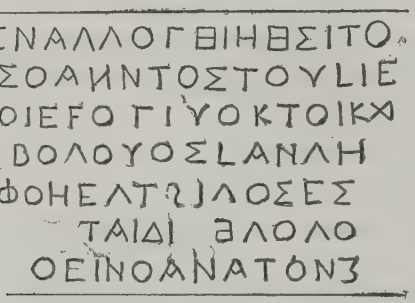
The idea of fabricating imitations of antiquity, and especially of important monuments, the discovery of which has produced a sensation in Europe, is an idea which naturally arises in the fertile brain of an Arab, always in search of some new method of turning to advantage Western curiosity.

The monument of Mesha has called forth a whole generation of Moabite pottery, which increases and multiplies in astonishing proportions. In the same way, a "find" that I had the good fortune to make, the stone from the Temple of Jerusalem, has suggested an analogous combination to persons engaged in this special industry. I join to this report the photograph of a false "Stone from the Temple," engraved on stone with a care and patience worthy of a better fate. I have the happiness of possessing this precious specimen of Jerusalem cunning. There is no necessity for me to point out the curious faults with which it is crowded. These are evident to every practised eye.

Here is a piece of work a good deal harder than the kneading of a little clay. It is a *tour de force* which, although it failed, seems at first more improbable than the exploits of Selim. It was, like Selim's work, executed by the same man whom I had employed about the original. This genius tried to sell the false stone to several amateurs in the city, and would perhaps have succeeded, if I had not, being warned by a squeeze sent to me at Constantinople, given the alarm at Jerusalem. It was a pity; for the potter, Selim, would have had in the

stone-cutters, Messrs. **** & Co., a redoubtable rival; and the mason's chisel would, perhaps, in the end, have triumphed over the potter's tool in a contest where European credulity was the stake.

The failure of this attempt depended on the forger's desire to make an inscription capable of translation, a point where all archæological forgeries fail. That is the reason why the Moabite pots, offspring of a prudent sire, are mute. They are entrenched in their character as incapable of translation for fear of crying their imposture aloud in opening their mouths.



The forger of the "Stone from the Temple" understood that, but too late. It is, perhaps, due to this change of sentiment that a great block, reputed to be from Siloam, has appeared. It is covered with Greek characters like that of the pretended "stone," but having no signification at all. The ruse succeeded, and the enigmatic inscription, having piqued the curiosity of a worthy and learned man, was bought by him. I could quote many examples of this kind, which throw a new light on the manufacture of "antiques," &c., for exportation which goes on at Jerusalem. Many a time since my first arrival here have I been offered copies of inscriptions notoriously false. Sometimes simplicity went so far as to ask specimens of the character which I should expect to find: a little more and I should be able to command my inscriptions.

Suffice it only to mention that I have only recently been offered, for ten francs, the very seal of "*David, servant of Jehovah,*" engraved in hard stone in Hebrew-Phœnician letters, a little fantastic but quite legible. And some time ago I was offered a stone covered with characters newly cut, something between Hebrew and Himyaritic! I expect soon to have the tables of the Law and the yellow Phœnician book containing the correspondence of Hiram and Solomon.

C. Clermont-Ganneau.

The following figures on the collection will be interesting. They have been furnished by the Rev. J. Niel:—

The first collection contains 911 pieces, of which 465 bear inscriptions.

The second collection contains 493 pieces, of which 60 only are inscribed.

The third collection contains 410 pieces, of which 68 are inscribed. The proportion, therefore, of inscribed to uninscribed pieces drops suddenly from 50 per cent. to 12 per cent.

THE STATUE OF HADRIAN PLACED IN THE TEMPLE OF JERUSALEM.

(*Reprinted from the "Athenæum" by kind permission of the proprietors.*)

JERUSALEM, *Feb.* 28, 1874.

A DONKEY-DRIVER of Jerusalem, who carries stones into the city for building purposes, picked up, some months ago, among the fallen blocks of a dry-stone wall, a marble head of natural size, which is probably an historical relic of great interest. I made him point out to me the exact position of his discovery. It is on the edge of the old Nablous road, thirty metres north of the Tombs of the Kings—that is, some minutes' walk from the Damascus Gate. The head, which now belongs to an effendi of the town, is that of a man. The beard is short and curly; the hair is abundant, with thick locks which cover a portion of the forehead. He bears a crown of laurels, the two branches of which are attached to a medallion, on which is engraved very distinctly in cameo an eagle, symbol of sovereign power.

The expression of the face from some points of view has a certain harshness; the eyes, the pupils of which are indicated by the sculptor, are looking upwards; the end of the nose is broken; and some portions of the face, especially the right eyebrow, have suffered. The whole back part of the head has been long since broken.

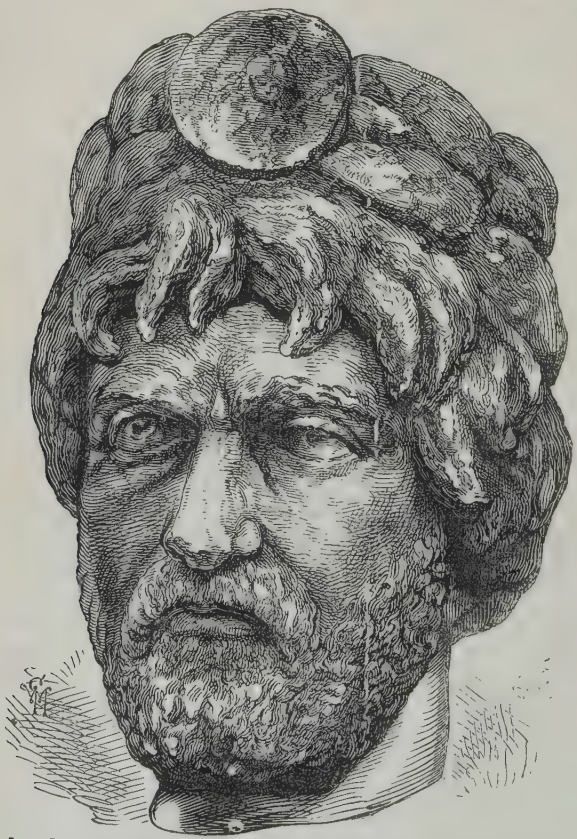
The style is entirely Roman; the workmanship is far from being faultless; but the effect of the whole is striking and imposing.

We have in this head clearly a portrait, and not a vulgar type. The mutilation of the nose, although slight, makes the identity of the personage at first difficult to distinguish. As I have not here the necessary works of reference to determine the question, I hesitated for some time between several hypotheses which presented themselves. I have now, after mature consideration, come back to my first impression, and I believe that we have in this head no other than that of the Emperor Hadrian. This is also the opinion of a man of great learning, the Archimandrite of the Russian Mission at Jerusalem. I think that this view will be admitted in Europe by *savants* competent to judge, and by all those who are in a position to submit it to a verification impossible here.

The finding of a head of Hadrian at Jerusalem is undeniably interesting; but were it not for certain peculiar circumstances which give it an historical value, it might be nothing but a mere curiosity.

Every one knows the last and terrible insurrection of the Jews, under the command of Barcochebas, "Son of the Star," which Hadrian had so

much trouble in subduing. After a victory dearly bought, which erased from the political world the name of Jew, Hadrian rebuilt Jerusalem and transformed it into a Roman colony, under the name of Ælia Capitolina. Among the numerous monuments with which he adorned the new city, Dion Cassius mentions a Temple of Jupiter Capitolinus,



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erected on the site of the ancient Jewish sanctuary. Some authors think that it was the projected erection of the pagan *naos* which was the determining cause, and not the consequence, of this last protestation of Jewish nationality so pitilessly suppressed.

In any case, there is no doubt that Hadrian placed *his own statue* in the Temple of Jupiter Capitolinus. In fact, the Bordeaux pilgrim observed, on the site of the Temple, *two statues of Hadrian*. St. Jerome,

who knew the place *de visu*, says expressly in his Commentary on Isaiah, "Where were formerly the Temple and the worship of God, are now placed the statue of Hadrian and the idol of Jupiter (Hadrian statua et Jovis idolum collocatum est)." It would also appear that the statue of the founder of Ælia Capitolina was an equestrian one, for the same writer, in his Commentary on St. Matthew, speaks of "the equestrian statue of Hadrian, which to this day stands upon the site of the Holy of Holies."

One may very well suppose that the pious but illiterate pilgrim of Bordeaux, in speaking of two statues of Hadrian, mistook for a second statue of the Emperor that which Jerome calls "the idol of Jupiter"—that is, the statue of the god to whom the Temple was dedicated. But two passages in Pausanias may be compared with the pilgrim's statement. He speaks in one place of a statue of Jupiter and that of Hadrian as forming a kind of group by themselves (I. iii. 5); and in another (I. xviii. 6), of two statues of Hadrian standing before the Temple of Jupiter Olympus. There may thus have been two statues at Jerusalem, one of them equestrian.

According to others, the two statues were those of Hadrian and his adopted son and successor Antoninus Pius. And if this theory be correct, we might have in the Latin inscription found in the Double Gate of the south wall the very dedication—"Imp: Cæs; Tito Ælio Hadriano Antonino Aug: p. p. pontifici anguri decreto decurionum"—engraved upon the pedestal of the latter statue.

In any case, there is no doubt that on the site of the Temple stood at least one statue of Hadrian, probably on horseback. The military nature of the events immediately preceding the foundation of the new Roman colony explain the use of an equestrian statue representing the Emperor as a victorious warrior.

Down to the end of the fourth century, the statue was intact; but it is evident, admitting even that the *prestige* of the imperial name was able to protect it from the hands of the Christians, that it could not escape the Vandalism of the Persians, and the vengeance of the Jews, their allies. And, at all events, it disappeared inevitably on the arrival of Omar with his Arabs; its fragments, which defiled the sacred rock, were probably carried away from the purified sanctuary and thrown out of the city with the filth and rubbish which Omar cleared away.

Strange irony of fate! Thrown face downwards on the old highway, this triumphant head of the conqueror of Barcochebas, the re-builder of Jerusalem, the Divine Hadrian, with the laurel leaf and the eagle of empire, has been trodden under foot for twelve centuries by everybody, great and small, who has entered the Holy City. And after this long ignominy, for a last outrage, the mutilated head, still with the same pride in his look, has been picked up by a poor peasant and thrown among his common building stones. If Jehovah had still His prophets, some new Isaiah would not fail to show in this sad fate an expiation

due, the chastisement of a jealous God avenging the profanation of His House.

C. CLERMONT-GANNEAU.

The above was in the hands of the Committee of the Palestine Exploration Fund for some time, but was withheld from publication in the hopes that M. Ganneau would acquire the head. In this he has been disappointed, the Archimandrite having bought it for a larger sum than M. Ganneau was authorised to offer. Drawings and photographs by M. Lecomte were sent to England with the memoir, and are now in the office of the Fund. Mr. Vaux writes on the subject:—"I have great pleasure in confirming M. Ganneau's judgment so far as I can, from the only available document before me, at present—his photograph. The characteristics of Hadrian's physiognomy are the crisp beard, the straight nose, the curved eyelids, and the curved if not curled, moustachios, &c. All these are here. The work appears to be rough, and the material coarse, but I have no doubt that the head is that of Hadrian, in spite of some doubtful points."

ON THE METEOROLOGY OF VARIOUS PLACES IN PALESTINE,

AT WHICH OBSERVATIONS WERE TAKEN BY THE ROYAL ENGINEERS.

BY JAMES GLAISHER, ESQ., F.R.S., ETC.

THE observations on which this paper is based were recorded by the survey party under the command of Lieutenant Claude R. Conder, R.E., and were taken at various places spread over the area comprised between latitudes 31 deg. 56 min. and 32 deg. 49 min. north, and longitude 34 deg. 50 min. and 35 deg. 15 min. east. The periods of time at the different stations during which observations were registered were very varying in length, and therefore the results given below can only be regarded as approximate; thus, at Caiffa the approximate mean temperature is deduced from 79 days' observations, but at Shayk Abrayk from 15 days' only. The local times of observation were 7 or 7.30 a.m., 9 a.m., and 3 p.m.

In the accompanying table the name of the station, with its latitude and longitude, and height above sea-level, is given with the length of the period of observation. These are followed by columns giving respectively the highest and lowest barometer readings and the mean value for the period, all reduced to 32 deg. Fahrenheit, but not to sea-level. Then follows the absolute maximum and minimum temperatures of the air, with the range in the period; the means of the maxima and minima and the mean daily range. Next in succession are the mean

values of dry and wet bulb thermometers and the hygrometrical deductions therefrom.

The *approximate mean temperature* is deduced from the means of all the maxima and minima temperatures uncorrected. The mean readings of a solar radiation thermometer are given for some of the stations, but at Jenin Lieutenant Conder remarks: "The maximum thermometer in rays of sun was broken on 13th September, the bulb being then open to the air. It was mended with sealing-wax covered with lime, the thermometer being immersed for some time (reversed) in boiling water to obtain the nearest possible approach to a vacuum. It has, however, read considerably lower since the 18th when mended, though not so low as whilst remaining broken." Readings after the 13th September are therefore of little value. The minimum radiation values are also wanting from 1872, June 6, to 1873, Feb. 10, the thermometer having been broken. The remaining columns are occupied by the average strength of the wind, the number of days in which it blew from different points and on which the air was calm, the mean amount of cloud, the number of days on which rain fell, and the amount collected.

I hope in future *Quarterly* journals to give papers on the results of longer-continued series of observations at Nazareth, Jaffa, and Gaza.

Yazúr, 1872, April 4 to 23.—During the whole period the weather was fine, though occasionally somewhat cloudy. Showers of rain fell on the 10th, 15th, and 16th. The air was generally calm. The readings of the barometer decreased from about 30·0 in. on the 5th to 29·7 in. on the 14th, increased to 30·0 in. again by the 19th, and was 29·7 in. at the end of the period. The highest reading of a thermometer in the sun's rays was 148·7 deg. on the 8th, and the lowest on the grass at night, 36·1 deg. on the 11th.

Khirbetha ibn Harith, April 25 to May 10.—Rain fell heavily between 7 and 9 a.m. on May 3rd, and again on the 4th, but with these exceptions the period was rainless. Light clouds were generally present except on the above-mentioned days, when they were much denser and larger in amount. A fall in the barometric column was registered previous to the rainy days, reaching its minimum, about 28·5 in., on the 2nd, but by the 6th had increased to 28·8in. The wind blew briskly from the south-west on the 3rd and 4th, the directions on the remaining days being variable. The maximum radiation thermometer registered 157·7 deg. on the 1st May, and the minimum 46·0 deg. on the 29th April.

Ain Sinia, May 11 to 30.—The weather throughout was generally fine, and with the exception of a slight shower on the 22nd no rain fell. Thunder was heard, but lightning was not seen, on the 22nd and 24th. Southerly winds were prevalent from the 11th to the 18th, but with light pressures; during the same time the sky was generally cloudy. On the 29th, observations were taken at 3 p.m., local time, the results being:—Barometer, 27·7 in.; and dry and wet bulb thermometers, 92·9 deg. and 67·1 deg. respectively. The maximum reading in the sun's rays was 158·7 deg. on the 22nd, and the lowest on the grass, 42·5 deg. on the 16th.

Kuzah, May 31 to June 17.—At this station the barometric changes were very small, the absolute range of reading amounting to but 0.2. in. In the early morning the air was usually calm, but fresh breezes sprung up in the afternoon. The weather was very fine and rainless throughout. Highest reading in sun's rays, 168·5 deg.

Nablus, June 18 to August 16.—The camp at Nablus was not very well situated for ascertaining the direction of the wind accurately, the results therefore are only approximate. The sky was very free from cloud, but fog was prevalent on the morning of the 22nd of July. Very small barometric changes were recorded. The pressure of the wind was light but very continuous. The highest reading in the sun's rays was 180·5 deg. on the 12th July.

Jeba, August 17 to 30.—Several oscillations of the barometer were recorded, the principal being an increase to 28·7 in. on the 19th, a decrease to 28·5 in. on the 21st, an increase to 28·8 in. by the next morning, followed by a decrease to 28·5 in. by the afternoon of the 23rd, and an increase to 28.8 in. again in the early morning of the 24th; this again being followed by a decrease to 28·5 in. by the afternoon of the 25th. Tolerably brisk westerly winds were prevalent, and light clouds generally present in the early portion of each day. The highest reading in the sun's rays was 173·5 deg. on the 17th. No rain fell.

Jenin, August 31 to September 28.—In the whole period the range in barometric readings amounted to but 0·2 in. The weather was somewhat variable at times, the sky being very cloudy, but no rain fell. Strong breezes were occasionally experienced, but the direction of the wind was changeable.

Umm el Fahm, September 29 to October 19.—Barometric changes inconsiderable. The air throughout was generally calm. A shower of rain fell on the evening of the 3rd October. Lightning, not accompanied by thunder, seen on the same and following evenings, and thunder (without lightning) was heard on the 7th, also accompanied by a slight shower. The amount of rain measured was only 0·002 in.

Mujaydel, October 20 to November 8.—The weather very variable throughout. Thunderstorms were experienced on the 21st, 22nd, 23rd, and 24th, with at times heavy rain, and on the 20th hail in a very small quantity. The Sirocco blew on the 26th October and 2nd November.

Nazareth, November 9 to 26.—From the 9th to the 13th showery weather with thunderstorms was prevalent, followed by a fine period till the 26th. An increase in the barometric readings was recorded till the 21st, when 29·0 in. was reached; a decrease till the end of the period then occurred. Easterly and north-easterly winds were prevalent from the 19th onwards, with light pressures.

Shaykh Abrayk, November 27 to December 11.—A shower of meteors was observed throughout the night of the 27th. The sky was generally cloudless till the 9th December; on the 10th it was showery all day. A thunderstorm occurred during the night of the 9th. The air was calm throughout.

Caiffa, December 12, 1872, to February 26, 1874.—The principal barometric changes were:—

	In.				In.		
An increase to	30.1	on the	17th Dec.	A decrease to	29.9	on the	15th Dec.
,,	30.1	,,	27th ,,	,,	29.5	,,	20th ,,
,,	30.3	,,	2nd Jan.	,,	29.9	,,	29th ,,
,,	30.2	,,	10th ,,	,,	29.9	,,	7th Jan.
,,	30.3	,,	16th ,,	,,	30.1	,,	12th ,,
,,	30.1	,,	22nd ,,	,,	29.9	,,	19th ,,
,,	30.0	,,	1st Feb.	,,	29.7	,,	30th ,,
,,	30.2	,,	5th ,,	,,	29.8	,,	3rd Feb.
,,	30.2	,,	9th ,,	,,	29.9	,,	7th ,,
,,	29.9	,,	13th ,,	,,	29.8	,,	12th ,,
,,	30.3	,,	23rd ,,	,,	29.8	,,	17th ,,

From the 12th to the 14th December the weather was very fine; from the 15th to the 28th showers of rain fell, accompanied by a thunderstorm on the night of the 24th. Another period of fine rainless weather occurred from the 29th to the 11th January, followed by a few unsettled days, and then again very fine till the end of January. A thunderstorm prevailed during the night of the 12th. During February it was very variable; rain fell frequently, accompanied at times by thunder and lightning, and by hailshowers on the 17th and 19th. The afternoon of the 14th was foggy, but on the following day the sirocco was experienced. During the latter part of the period it was very squally.

Jeba, near Athlit, February 27 to March 21.—The barometer readings decreased from 29·9 in. on the 9th to 29·4 in, on the 13th, then increased again to 29·9 in. by the 20th. The period was generally fine, though rain fell occasionally. Thunderstorms were prevalent on the 16th and 18th.

Kannir, March 22 to April 8.—Several oscillations of the barometer were experienced during the latter portion of March, accompanied by gales and heavy showers. A thunderstorm occurred on the 25th. The remainder of the period was fine, broken, however, by one stormy afternoon, viz., that of the 5th April.

Zayta, April 9 to 25.—A somewhat unsettled period prevailed from the 14th to the 17th, with thunderstorms, but otherwise it was very fine throughout.

Mukhalid, April 26th to May 7; *Kefr Zebad*, May 8 to 23.—Very fine generally. The 9th and 23rd were squally, with sirocco, and on the 17th and 18th thunder unaccompanied by lightning was heard.

NAME OF STATION.	Height above Sea.	Period of Observation, 1873.	BAROMETER.				TEMPERATURE OF AIR IN PERIOD.						Local Times of Observation.	MEANS.					Approximate Mean Temperature from Max. and Min.	MEAN READING OF THERMOMETER.		WIND.							Mean Amount of Cloud.	RAIN.	
										Mean				Dry.	Wet.	Hygrometrical Deductions.						Estimated Strength.	Relative Proportion of at 7 a.m.							
			Highest.	Lowest.	Range.	Mean reduced to 32° Fahr.	Highest.	Lowest.	Range.	Of all Highest.	Of all Lowest.	Daily Range.				Dew-point.	Elastic Force of Vapour.	Degree of Humidity. Saturation=100		Maximum in Rays of Sun.	Minimum on Grass.		N.	E.	S.	W.	Calm.		Number of Days it fell.	Amount Collected.
	feet		in.	in.	in.	in.	deg.	deg.	deg.	deg.	deg.	deg.	hour.	deg.	deg.	deg.	in.		deg.	deg.	deg.								in.	in.
Yagur. Lat. 32° 1′ N. Lon. 34° 50′ E.	68	April 3 to April 23	29·980	29·707	0·273	29·843	98·0	41·0	57·0	74·7	48·2	26·5	7 a.m.	59·4	56·4	53·7	·414	82	61·5	141·5	43·3	0·8	0	1	3	3	13	2·6	3	0·36
													9 a.m.	68·5	61·8	56·6	·458	65												
Khirbetha ibn Harith. Lat. 31° 56′ N. Lon. 35° 4′ E.	1250	April 25 to May 10	28·841	28·532	0·309	28·697	87·1	51·0	36·1	75·6	55·2	20·4	7 a.m.	62·7	56·8	51·8	·386	68	65·4	146·7	50·6	0·8	1	6	4	3	2	2·5	2	1·15
													9 a.m.	65·6	60·1	55·6	·443	71												
Ain Sinia. Lat. 31° 58′ N. Lon. 35° 14′ E.	2060	May 11 to May 30	27·911	27·686	0·225	27·827	95·7	45·0	50·7	79·7	53·8	25·9	7 a.m.	64·7	58·2	52·8	·400	65	66·8	150·2	48·1	1·0	2	3	6	3	6	2·2	0	0·00
													9 a.m.	70·7	61·2	53·9	·417	56												
Kuyah. Lat. 32° 9′ N. Lon. 35° 15′ E.	1640	May 31 to June 17	28·409	28·209	0·200	28·296	100·9	53·8	47·1	88·0	61·1	26·9	5½ a.m.	66·9	58·2	51·2	·377	58	74·6	154·0	..	..	..	..	..	..	..	..	1·3	0	0·00
													7 a.m.	71·0	61·3	53·9	·417	54												
													9 a.m.	76·0	62·3	52·7	·398	44												
													3 p.m.	88·3	66·7	53·0	·402	30												
Nablus. Lat. 32° 13′ N. Lon. 35° 15′ E.	1950	June 17 to Aug. 16.	27·973	27·741	0·232	27·848	94·1	56·0	38·1	84·8	64·1	20·7	7 a.m.	70·3	64·9	60·7	·534	71	74·5	170·8	..	1·1	at 6	9 11	a. 21	m 9	3	1·4	0	0·00
													9 a.m.	75·6	66·3	59·7	·512	57												
													3 p.m.	82·5	69·7	61·1	·539	49												

NOTE.—Barometer reading Oct. 3rd, 9 a.m., 29·961 in. altered to 28·961 in.

NAME OF STATION.	Height above Sea.	Period of Observation, 1872.	BAROMETER.				TEMPERATURE OF AIR IN PERIOD.						Local Times of Observation.	MEANS.					Approximate Mean Temperature from Max. and Min.	MEAN READING OF THERMOMETER.		WIND.							Mean Amount of Cloud.	RAIN.	
			Highest.	Lowest.	Range.	Mean reduced to 32° Fahr.	Highest.	Lowest.	Range.	Mean. Of all Highest.	Mean. Of all Lowest.	Mean. Daily Range.		Dry.	Wet.	Hygrometrical Deductions. Dew-point.	Hygrometrical Deductions. Elastic Force of Vapour.	Hygrometrical Deductions. Degree of Humidity. Saturation=100		Maximum in Rays of Sun.	Minimum on Grass.	Estimated Strength.	Relative Proportion of at 9 a.m. N.	E.	S.	W.	Calm.		Number of Days it fell.	Amount Collected.
	feet.		in.	in.	in.	in.	deg.	deg.	deg.	deg.	deg.	deg.	hour.	deg.	deg.	deg.	in.		deg.	deg.	deg.								in.	in.
Jeba. Lat. 32° 20′ N. Lon. 35° 14′ E.	1300	Aug. 17 to Aug. 30	28·824	28·451	0·373	28·571	90·0	63·2	26·8	86·8	68·0	18·8	7 a.m.	71·4	68·8	66·8	·358	85	77·4	164·0	..	..	..	..	..	..	..	1·2	0	0·00
													9 a.m.	77·2	69·9	64·8	·614	66												
													3 p.m.	83·5	71·9	64·2	·601	52												
Jenin. Lat. 32° 27′ N. Lon. 35° 18′ E.	640	Aug. 31 to Sept. 28	29·411	29·215	0·196	29·301	102·7	65·5	37·2	92·5	69·8	22·7	7 a.m.	75·8	71·3	68·0	·688	77	81·2	162·4	..	1·4	1	1	6	13	8	1·9	0	0·00
													9 a.m.	81·5	72·6	66.6	·653	61												
													3 p.m.	90·2	73·0	62·3	·560	40												
Umm-el-Fahm. Lat. 32° 31′ N. Lon. 35° 9′ E.	1260	Sept. 29 to Oct. 19	28·890	28·671	0·219	28·805	101·4	58·6	42·8	84·9	64·2	20·7	7 a.m.	68·9	64·0	60·1	·520	73	74·5	138·9	..	0·5	4	2	2	1	12	1·9	0	0·00
													9 a.m.	76·9	65·6	57·7	·477	51												
													3 p.m.	80·7	65·8	55·7	·439	42												
Mujaydel. Lat. 32° 41′ N. Lon. 35° 14′ E.	770	Oct. 20 to Nov. 8	29·527	29·318	0·209	29·416	95·9	56·3	39·6	82·5	61·6	20·9	7.30a.m.	67·0	61·2	56·5	·459	69	72·1	134·1	..	0·7	1	2	2	1	14	4·7	4	1·41
													9 a.m.	72·5	65·3	59·9	·518	64												
													3 p.m.	75·3	66·9	60·9	·535	61												
Nazareth. Lat. 32° 42′ N. Lon. 35° 16′ E.	1330	Nov. 9 to Nov. 26	29·018	28·675	0·343	28·818	76·2	57·3	18·9	70·4	60·1	10·3	7.30a.m.	61·0	55·0	49·8	·358	67	65·3	116·9	..	1·2	3	7	5	1	2	2·3	4	2·19
													9 a.m.	64·2	55·0	47·4	·326	54												
													3 p.m.	69·9	58·0	48·9	·346	47												
Shaykh Abrayk. Lat. 32° 42′ N. Lon. 35° 7′ E.	530	Nov. 27 to Dec. 11	29·659	29·354	0·305	29·472	75·6	43·8	31·8	72·7	47·4	25·3	7.30a.m.	50·9	47·3	43·5	·284	76	60·1	..	..	0·0	0	0	0	0	15	1·9	2	0·53
													9 a.m.	58·4	52·6	47·4	·328	67												
													3 p.m.	69·4	60·0	52·7	·398	55												

NAME OF STATION.	Height above Sea.	Period of Observation, 1873.	BAROMETER.				TEMPERATURE OF AIR IN PERIOD.						Local Times of Observation.	MEANS.					Approximate Mean Temperature from Max. and Min.	MEAN READING OF THERMOMETER.		WIND.							Mean amount of Cloud.	RAIN.	
			Highest.	Lowest.	Range.	Mean reduced to 32° Fahr.	Highest.	Lowest.	Range.	Mean. Of all Highest.	Mean. Of all Lowest.	Mean. Daily Range.		Dry.	Wet.	Hygrometrical Deductions. Dew-point.	Hygrometrical Deductions. Elastic Force of Vapour.	Hygrometrical Deductions. Degree of Humidity. Saturation=100		Maximum in Rays of Sun.	Minimum on Grass.	Estimated Strength.	Relative Proportion of, at 9 a.m. N.	E.	S.	W.	Calm.		Number of Days it fell.	Amount Collected.
	feet.		in.	in.	in.	in.	deg.	deg.	deg.	deg.	deg.	deg.	hour.	deg.	deg.	deg.	in.		deg.	deg.	deg.									in.	in.
Caiffa.		Dec. 12																													
Lat. 32° 49′ N.	50	to	30·321	29·499	0·822	30·002	83·2	41·3	41·9	64·2	49·8	14·4	9 a.m.	56·3	51·0	46·1	·313	68	57 0	...	...	1·7	4	28	29	4	3	3·9	28	6·67
Lon. 34° 59′ E.		1873,											3 p.m.	63·7	56·7	50·9	·372	63												
		Feb. 26																													
Jeba, near Athlit		Feb. 27											7.30a.m.	58·2	55·0	52·1	·390	80												
Lat. 32° 32′ N.	345	to	29·988	29·468	0·520	29·802	82·9	49·8	33·1	68·6	53·3	15·3	9 a.m.	59·4	57·3	55·5	·440	89	61·0	...	53·0	1·3	1	4	9	4	5	4·0	9	3·31
Lon. 35° 1 E.		Mar. 21											3 p.m.	66·2	61·9	58·5	·490	77												
Kaunir.		Mar. 22											7.30a.m.	61·0	56·9	53·3	·436	77												
Lat. 32° 32′ N.	345	to	29·855	29·366	0·489	29·582	88·0	39·2	48·8	73·6	49·5	24·1	9 a.m.	66·1	60·0	55·0	·433	68	61·5	...	46·4	1·6	1	6	4	6	1	5·8	7	0·73
Lon. 35° 1 E.		April 8											3 p.m.	69·0	61·7	56·0	·449	63												
Zayta.		April 9											7.30a.m.	66·0	59·3	53·8	·414	65												
Lat. 32° 23′ N.	360	to	29·762	29·435	0·327	29·572	99·1	47·6	51·5	83·0	55·3	27·7	9 a.m.	77·5	61·2	49·8	·359	38	69·1	...	51·5	0·9	1	7	4	3	2	3·3	1	0·36
Lon. 35° 3′ E.		April 25											3 p.m.	79·9	64·9	54·7	·428	41												
Mukhalid.		April 26											7 30a.m	68·1	62·5	58·1	·485	70												
Lat. 32° 30′ N.	70	to	30·055	29·612	0·443	29·880	93·7	44·1	49·6	82·2	55·8	26·4	9 a.m.	73·2	66·1	60·9	·534	66	69.0	...	52·8	1·2	3	2	1	3	3	4·0	1	0·01
Lon. 34° 52′ E.		May 7											3 p.m.	78·3	67·5	60·1	·520	54												
Kefr Zebad.		May 8											7.30a.m.	71·6	63·6	57·6	·476	61												
Lat. 32° 13′ N.	880	to	29·114	28·876	0·238	28·958	94·9	56·2	38·7	84·7	63·7	21·0	9 a.m.	80·2	64·3	53·4	·410	39	74·2	...	60·6	0·9	1	1	2	2	10	3·1	1	0·24
Lon. 35° 4′ E.		May 23											3 p.m.	82·8	66·5	55·6	·444	39												